

# GROUP LENDING PROGRAMS AND RURAL FINANCE IN DEVELOPING COUNTRIES

Paul Burkett\*  
University of Miami

---

## 1. Introduction

Recently there has been an upsurge of interest in group lending as a method of providing credit to small farmers in developing countries (Adams and Romero 1981, Owusu and Tetteh 1982, Schaefer-Kehnert 1983, Mosley and Dahal 1985, Bratton 1986, Wieland 1988). In the present paper, group lending is defined to include programs in which members of borrower-groups are jointly liable for loan defaults by individual group-members. This joint liability may entail a cut-off of future credit to groups which do not repay loans and/or a legal agreement by group-members to repay defaulted balances of other group-members. Group lending programs differ in the extent to which the administration and repayment of loans occurs via direct contacts between individual group-members and the lender or via contacts between group-representatives and the lender.

The establishment of group lending programs is partly a response to the failure of previous subsidized loan projects to generate *and sustain* flows of credit to small farmers. Projects designed to provide cheap credit to individual farmers have often suffered from regressive credit allocation, high arrears, and operating losses—making the viability of lending institutions dependent on large external subsidies from central banks or international donors (Adams 1988). In light of these failures, the joint liability feature of group lending programs is designed to lower the administrative costs and risks incurred in lending to small farmers. In addition, group lending may lower the transaction costs incurred by lenders and borrowers if it becomes unnecessary for the lender to negotiate separate terms for individual borrowers.

At the same time, the argument most often used to support enactment of group lending schemes is the same as that for previous subsidized credit programs: namely, that rural finance projects should be viewed primarily as instruments for funneling cheap credit to small farmers. As is pointed out below, this focus of group lending programs on the provision of cheap credit has often caused such schemes to experience problems similar to those incurred under subsidized loan programs for individual farmers. The present paper argues that the design and evaluation of group lending schemes should reflect the goal of improving the quality of rural financial services (including savings *and* credit services) by promoting the development of rural financial networks and institutions which

---

\* The author extends gratitude to Richard C.K. Burdekin, Robert C. Vogel, and Raymond P.H. Fishe for helpful discussions in earlier stages of this work, and to Debbie Zamparello for professionally typing the manuscript.

---

can be viable without continued inflows of external, subsidized funds.

Section 2 discusses the potential functions of group lending schemes in connection with financial development, the role of informal finance, and the proper goals of rural finance projects. Section 3 describes some of the mechanisms by which interest rate ceilings and other controls have stunted the potential contribution of group lending to rural financial development. Sections 4 and 5 discuss two specific issues in the design of viable group lending programs: the conditions for successful use of joint liability as loan security, and the proper role of savings mobilization and informal finance in such schemes. Section 6 summarizes the main conclusions of the study.

## **2. Financial Development, Informal Finance, and Group Lending**

Group lending is usually supported as a mechanism for lowering the cost of credit for small farmers. This rationale is often based on the idea that in the absence of formal credit, small farmers would be "exploited" by the high interest charges of informal moneylenders. A related hypothesis is that imperfect information may cause individual small farmers to be quantity-rationed out of formal lenders' portfolios even in the absence of interest rate controls. In this view, adverse selection and incentive effects may prevent formal lenders from clearing the loan market by charging higher interest rates to higher-risk borrowers (Arndt 1982, Carter 1988). Group lending schemes might then increase small farmers' access to formal credit by lowering the default risks incurred by formal lenders. In either case, the underlying argument is that the cost of informal credit is too high relative to formal credit, and that group lending schemes are successful to the extent that they result in a higher ratio of formal loans to total borrowing by small farmers. This argument suffers from two flaws: (1) a purely negative view of informal finance, and (2) a failure to incorporate the long run viability of lending institutions (and associated customer relationships) into the criteria for "success" of group lending schemes.

The quantitative importance of informal finance in developing countries implies that it may provide important clues about the financial services which are most valuable to small farmers and other rural households. This holds regardless of whether informal finance is a rational response to the repression of formal financial services by government regulations, or, instead, a response to equilibrium credit rationing of rural clientele (e. g., small farmers) by urban-oriented banks. Informal moneylenders are a popular source of credit in many rural areas because of their accessibility and flexibility relative

---

---

to formal lenders (Wai 1980). Miller and Ladman (1983), in an analysis of survey responses by 699 Bolivian farm households, find that the main reason given for not borrowing from formal sources was the relatively low transaction costs for informal loans. Drawing upon interviews with 145 farm household heads in Nigeria, Okonjo-Iweala (1982, p. 187) reports that the reasons most often given for using informal credit sources were: (1) the accessibility of informal loans, and (2) the flexibility of informal loans with respect to loan use, loan size, and loan repayment.

On the savings side, the widespread existence of rotating savings and credit associations (ROSCAs) in rural areas is partly due to the high transaction costs and low yields associated with formal deposits (Bouman 1977). ROSCAs may provide not only a convenient outlet for savings, but also periodic access to a large pool of savings which may provide enough resources to achieve important economies of scale in some investment project. The rural savings capacities embodied in ROSCAs may be significant even in terms of macro-aggregates. For example, Begashaw (1978, p. 249) estimates that in Ethiopia annual ROSCA savings are about 8-10% of GDP.

Thus, an important lesson of informal finance is that rural households place a high value not only on accessible and flexible credit services, but also on savings opportunities. For small farmers, discontinuous and uncertain revenues and expenditures make liquid savings instruments particularly important. The availability of liquid savings instruments of reasonable yield may be crucial for the funding of operating costs associated with capital goods, as has been demonstrated theoretically by Burkett and Vogel (1987). Group lending programs are unlikely to be helpful to small farmers if they are viewed merely as a mechanism for displacing informal loans with (cheaper) formal credit—without taking into account the important services provided by informal networks. In addition to indicating the financial services which are valued highly by rural households, informal moneylenders and ROSCAs may also be an important resource which can be utilized to lower the administrative costs and risks incurred by formal lenders in group lending programs (see Section 5 below).

Of course, it is important not to claim too much for informal finance. As stated by Adams (1988, p. 359): "Informal financial markets are unable to intermediate between surplus and deficit units that are widely separated. Only a formal financial system can do this." Limitations in the scale, scope, and specialization economies of informal lenders may help explain part of the differential between formal and informal interest rates. However, this differential is also due to the fact that informal lenders often deal with high-risk borrowers such as small farmers who have been rationed out of the portfolios of formal

---

---

lenders. The relatively low creditworthiness of such borrowers, and the corresponding harshness of informal credit terms (high interest rates, low collateral valuation) stem from the low and uncertain rate of return on capital in rural areas—which is in part due to government policies (overvalued exchange rates, price ceilings for agricultural goods, etc.) and in part due to the inherently risky nature of small scale agriculture. In this context, a sustained extension of formal credit to small farmers requires increases in the creditworthiness of this clientele, as pointed out by Gregory and Adams (1987, p. 10).

The issue, then, is how to design group lending schemes which promote sustained, cost-effective customer relations between formal lenders and non-traditional clientele such as small farmers—rather than merely augmenting or displacing informal loans with formal credit. Programs which experience operating losses and fail to mobilize a relatively large proportion of their loanable funds through voluntary deposits are unlikely to be viable without substantial infusions of external funds which international donors and/or central banks are unlikely to sustain in the long run. Since the resulting program failures leave small farmers dependent on informal markets for loans, the relatively high interest charges of informal lenders cannot be used as a rationale for schemes which fail to cover costs or mobilize voluntary savings.

### **3. Interest Charges and Cost Effectiveness of Group Lending**

Group lending programs have often been unable to cover costs due to low interest charges on loans. The specific problems which arise from this failure to cover costs depend on the particular characteristics of each scheme, including: (1) the extent to which external funds continue to be available, (2) the particular tradeoff between administrative cost and arrears rates which is chosen by the formal lender, and (3) the extent to which the formal lender is constrained to continue expansion of its group loan portfolio despite operating losses and/or rising default rates.

The adverse effects of unrealistic interest rates are apparent from the results of a group lending program undertaken by the Dominican Development Foundation (DDF) during the period 1966-79 (Adams and Romero 1981). During 1977-78, the DDF's administrative costs amounted to 6.2 percent of the value of new loans. With inflation at roughly 10 percent, commercial interest rates of about 7 percent, and a (conservative) debt write-off figure of 10 percent of new loans, a loan interest rate in excess of 30 percent would have been in order. The DDF's actual interest charges were only 10 percent. This left

---

the DDF dependent upon external funds from international donors. At the same time, the inability of the DDF to cover its lending costs eventually led to a shrinkage in the number of groups to which it allocated loans and to a sharp increase in the average loan size per group, from \$1,400 per loan (with 393 groups) in 1973-74 to \$12,926 per loan (with 124 groups) in 1978-79. This inability to cover costs may also have affected the quality of the DDF's group-credit services. Adams and Romero (1981, p. 222) report that group borrowers "were often forced to borrow money in the informal market to cover their production expenses" because they were only able to obtain loans several months after production expenses came due. In their analysis of a group lending scheme operated through the Agricultural Development Bank (ADB) in Ghana, Owusu and Tetteh (1982, p. 79) observe:

Even though the Bank has succeeded in reducing its overheads by sharing some of the costs of loan servicing with members of the groups, the interest rate of 13% charged under the programme falls short of the cost of administering a loan to an individual farmer in any of the groups. Also, the low rate of interest has been a limitation in making more credit accessible to small scale farmers. In view of the high interest rate on deposits, it has not been prudent and profitable for the Agricultural Development Bank to finance small scale farmers in the programme from deposit accounts, an important source of funds at the disposal of the bank.

Although the (reported) arrears rate of roughly 15% on loan principal for the ADB program is moderate in comparison with many other small farmer credit programs, it is nonetheless large in comparison with the 13% loan interest charge (Wieland 1980, p. 12). The operating losses incurred under this scheme may have led to deterioration in the quality of the group credit services provided by the ADB. Table 1 provides one possible indication that group credit services may have deteriorated. The increase of average group size from 11.7 in 1969 to 70.0 in 1980 contradicts the suggestion on group size made by Egger (1986, p. 457), who states: "Experience has shown that those which have lasted longest are homogenous groups of no more than 20 members with common origins, outlooks and interests." Certainly, it seems difficult to believe that joint liability could be self-enforced by groups with upwards of 70 members. If the reported arrears rate of 15% is accurate, this may only reflect the desire of individual group members to maintain access to credit subsidies rather than any gains from joint liability per se. Such a motivation for repayment could be eroded rapidly if the availability of external funds used to cover the ADB's operating losses (and hence the future availability of the credit subsidy) were to become less certain.

Even if default costs are controlled by some combination of small group size and administrative enforcement of repayment, unrealistic ceilings on interest charges still tend

to produce economic losses and a corresponding disincentive to extend group credit services. For example, Schaefer-Kehnert (1983), in his description of a group lending scheme enacted by the Lilongwe Land Development Program (LLDP) in Malawi, argues that the LLDP's default costs were low due to the fact that the borrower groups were farmers' clubs formed along kinship and communal lines in connection with agricultural extension work. The smallness of the groups (10-30 members) may also have facilitated the achievement of a 97.4% repayment rate over the period 1969-85 (Wieland 1988, p. 8). However, in light of the 10% loan charge and administrative costs of 8.5% of credit volume in 1986/87 (with an administrative cost ratio as high as 30% for some offices), it appears that the LLDP program suffers sizable *economic* losses under any realistic definition of opportunity cost. Thus, Von Pischke and Rouse (1983, p. 32) note that the program will "require continued substantial subsidy unless interest charges are raised." Further, although the amount of credit disbursed under this program increased from 7.8 million Malawi Kwacha (MK) in 1982/83 to MK 17.4 million in 1985/86, "as of September 30, 1986 there were existing an estimated committed but undisbursed resources in ADD credit funds amounting to MK 44.2 million" (Wieland 1988, p. 9). The fact that undisbursed funds (presumably invested in other loans or deposits) were more than 250% of credit disbursed may reflect the economic losses incurred in group lending.

**Table 1**  
PARTICIPATION AND AVERAGE GROUP SIZE IN THE ADB SCHEME IN GHANA

YEAR	NUMBER OF GROUPS	TOTAL NUMBER OF PARTICIPANTS	AVERAGE GROUP SIZE
1969	23	268	11.7
1970	109	1,538	14.1
1971	290	7,854	27.1
1972	285	15,749	55.3
1973	501	26,283	52.5
1974	876	43,663	49.8
1975	1,238	87,541	70.7
1976	3,403	161,819	47.6
1977	4,200	214,973	51.2
1978	4,350	260,974	60.0
1979	4,783	310,900	65.0
1980	5,062	354,400	70.0

Source: Calculated from Wieland (1988, p. 13, Tabel 4).

Similarly, Bratton (1986) describes two group lending schemes in Zimbabwe which experienced operating losses despite achieving lower default rates than those incurred on loans to individual small farmers. One group scheme was operated by Silveira House (SH), a Catholic agency, and the other by the government-sponsored Agricultural Finance Corporation (AFC). The AFC-scheme was operated alongside the AFC's individual small farmer credit program. The SH-scheme featured a weaker form of joint liability in which a group's continued access to credit was dependent upon loan repayment, while in the AFC-scheme all group-members were jointly liable for loan balances not repaid by individual group-members. The data in Table 2 show that even though the two group-schemes experienced lower (though still significant) default rates than the AFC's individual small farmer program, the low interest charges resulted in large operating losses even ignoring opportunity cost.

Restrictions on interest charges can be particularly disastrous for programs in which borrower groups are organized from above according to unrealistic criteria and schedules<sup>1</sup>.

One can imagine the political pressures on GOs exerted by those (including the relatively wealthy) desiring access to the SFDP-groups, especially given the loan interest charges of 11-15% which "are well below those charged by village money-lenders" (Ibid, p. 194). Preliminary analysis indicates that 27% of loan-recipients owned more land and had higher incomes than the officially-stipulated ceilings for classification as a 'small' farmer under the program (Ibid, p. 197). With administrative costs of over 7% of credit disbursed, overall (reported) arrears rates in excess of 15% in most years (and over 50% in

---

For example, Mosley and Dahal (1985, p. 198), in their analysis of a group-scheme operated by the Small Farmer Development Project (SFDP) in Nepal, observe that "the circumstances in which the Group Organizer (GO) is expected to carry out the 'pre-investment survey' preclude him from obtaining any meaningful data on farmers' incomes. He is expected to obtain detailed information on family members, land-holdings, subsidiary occupations and income, agricultural occupations with details of crops and types of livestock plus income per household and per capita, individual skills, and purposes for which the loan is required, for an *entire panchayat* (about 1000 families, or 6000-7000 people) within the space of one month. Those who have done this kind of field research know that this is a ludicrous request, and that twelve months, plus a further three months for recording and analysis of data, is a bare minimum for obtaining meaningful income and expenditure data, with first-class clerical or computing resources, on a sample of 200 farm families, or about one-fifth the number in an average *panchayat*. Current procedures, therefore, are an invitation to the GO to fabricate whatever figures he pleases if that is going to get a group formed sooner, since it is ultimately by the speed with which successful groups are formed that GOs are judged, and not by the accuracy of their figures, which nobody in any case is going to be able to prove right or wrong".

---

some areas), and assuming a 5% cost of funds, Mosley and Dahal (1987) estimate that the SFDP would have to charge at least 28% on loans just to break even. Given the actual interest charges of 11-15%, it is not surprising that roughly 90% of SFDP funds come from external sources.

#### 4. Joint Liability Problems

Joint liability does not automatically lower the administrative costs and default risks incurred by formal lenders. Default risks are lowered only if the group is collectively more capable or more willing to repay loans than are individual members of the group. If this is not the case, then "the lenders may be saddled with doubts about the viability of the group as well as with doubts about the capacity and willingness of members to repay loans" (Adams 1978, p. 7). The less certain the lender is about the effectiveness of joint liability, then the more likely it is that the lender will be forced to undertake at least some loan application procedures with individual group-members rather than with group-representatives—which obviously vitiates any economization on the lender's administrative costs (and borrower transaction costs) relative to loans to individual small farmers.

For borrowers, joint liability may yield the benefit of access to formal loans which individual group-members would otherwise be rationed out of. However joint liability and group-membership also impose costs on individual borrowers. The most obvious cost is any loss of wealth in the event that another group-member defaults. This cost may be just a lack of access to future credit from the formal lender (and any resulting decrease of future income) and/or an actual liability for repayment of the defaulted balances of other group-members. In addition, individual borrowers may incur transaction costs when they participate in group-meeting specifically connected with gaining access to formal loans or with the enforcement of loan repayment by group-members. Finally, individual borrowers incur additional transaction costs to the extent that loan application procedures involve direct contacts between the formal lender and individual group-members.

Borrower groups can only be viable if individual group-members perceive benefits which outweigh the costs entailed in enforcing joint liability. Although the existing evidence is incomplete, it appears that smaller groups (approximately 20 members or less) have a better chance of sustaining themselves than do larger groups, everything else equal. This is also supported by collective action theory, which argues that it is more difficult to maintain a common interest in larger groups due to the 'free rider' problem. Also,



groups tend to be more viable if all members have relatively equal access to the benefits from group-membership, and this may be more easily achieved in smaller groups (Adams 1978, p. 5). Members of smaller groups may also incur lower transaction costs in group-participation. This is especially likely if the groups have been previously formed for purposes other than simply gaining access to cheap formal credit. In this latter case, the knowledge obtained from other economic transactions (or other forms of communication) occurring regularly within the group may lower the extra transaction costs incurred by individual members in evaluating the debt capacities of potential members of a credit-group, enforcement of repayment, etc.

For lenders, the potential decrease of default risk via joint liability may not materialize if the shocks (e.g., crop failures, livestock diseases, price shocks, etc.) which underlie loan defaults are common to group-members. More generally, Fishe and Vogel (1988) provide a theoretical analysis which suggests that the riskiness of financial intermediation in rural areas where productive activities are subject to common adverse shocks may help explain why informal financial operations (e.g., ROSCAs and individual moneylenders) provide a large share of savings and credit services in such areas. Mosley (1986) has designed a crop and livestock insurance scheme to deal with this problem. His simulations, based on data for the previously mentioned group lending scheme in Nepal, suggest that the insurance scheme, if run on a break-even basis (with premia incorporated into loan interest charges), would still leave the group lending program competitive with informal moneylenders as a source of credit. However, his analysis is based on a small sample of probabilities of livestock and crop failures for two relatively small regions of Nepal and India. Mosley (1986, p. 316) notes that the actual implementation of the insurance program may require *re-insurance* of the program itself to avoid the bankruptcy that would almost certainly occur if a "widespread national disaster" were to happen "during the early years of the insurance scheme before the administrative authority has been able to accumulate sufficient reserves." In any event, insurance may be an integral component of viable group lending schemes especially in areas where borrowers are subject to common shocks.

Fishe (1988) has suggested that individual group-members will be more likely to accept joint liability (and, by implication, lenders' default risks will be lowered) if they gain from defaults by other group-members by gaining access to the defaulting member's collateral. This presumes that the collateral is made up of some group-specific capital (e.g., contiguous land-holdings) which has a higher value for group-members than for "outsiders."

---

However, as Youngjohns (1980, p. 194) states: "There may be great political difficulties in repossession, for the repossession and sale of land may lead to retrograde redistribution from the poor to the better-off." If such sale of defaulted collateral to group-members leads to increased inequality of wealth and power with the group, the relatively equal distribution of group benefits which may be required for continued reproduction of the group may be threatened. This may be especially likely if member-defaults are due to shocks which are common to a large fraction of group-members, so that the few (presumably relatively wealthy) members which survive the shock are able to accumulate large amounts of collateral from defaulting members.

Some support for the hypothesis that viable borrower-groups should have common interests aside from that of gaining access to cheap credit is provided by the previously mentioned group schemes in Zimbabwe (see Table 2). Both the SH-scheme and the AFC-scheme enjoyed significantly lower default rates than for the AFC individual small farmer program, despite suffering operating losses due to low interest charges. The SH-scheme had administrative costs roughly equal to the AFC individual farmer program, while the AFC's group-scheme (which involved groups previously formed under the SH-scheme) had relatively minuscule administrative costs, which may suggest that subsequent to startup costs associated with group-formation, the group-schemes became much more advantageous in terms of decreased administrative costs. Interestingly, Bratton (1986, p. 118) reports that the group-schemes emphasized the importance of "a closer connection between the use of credit and other group activities... the strength of the group rather than the farming record of the individual member is the criterion for loan eligibility."

## **5. Savings Mobilization and Informal Finance in Group Lending**

There are at least four reasons why savings mobilization should be an important component of rural finance projects (Vogel 1984, Vogel and Burkett 1986b). First, deposit mobilization can improve resource allocation by making more funds available to deficit production units with high-yielding investment projects, while simultaneously facilitating the self-financing of investments by deposit-holders if deposits have a higher yield or liquidity than alternative assets such as cash or inflation hedges. Second, since true financial intermediaries normally deal with larger numbers of savers than borrowers, programs which include improvements in deposit services should reach larger numbers of rural households than subsidized credit projects funded from exter-

**Table 2**  
PERFORMANCE OF GROUP LENDING SCHEMES IN ZIMBABWE

	AFC INDIVIDUAL SMALL FARMER SCHEME	SH GROUP LENDING SCHEME	AFC GROUP LENDING SCHEME
Costs*			
Administration (per farmer, 1983)	11	12	1
Default (normal seasons, 1980-1982)	46	28	15
Total Cost*, annual	56	40	16
Interest			
Interest charged	13	5	13
Interest recovered (on repayments)	6	3	11
Rate of return, annual in nominal terms, net of inflation	-50	-37	-5

\* As a percentage of loan capital.

Source: Bratton (1986, p. 129).

nal sources. Third, deposit mobilization can improve the long run viability of rural financial institutions by making these institutions less dependent on the (often uncertain) availability of government or donor funds. Fourth, for international donors, deposit mobilization may be a highly cost-effective method of promoting capital formation, especially compared to subsidized credit projects whose continuation often requires sizable and sustained inflows of donor funds.

As per linking savings with credit, Vogel and Burkett (1986a) argue that access to credit may be an important determinant in the selection of deposit institutions by non-wealthy households in rural areas. This is supported by the vitality of ROSCAs—which entail a direct link between savings and credit—in many developing countries, and by the decline of deposits in postal savings units (which normally do not offer loans) relative to time and savings deposits in other institutions (which offer loans) in 10 out of 13 developing countries surveyed for the years 1970-83.

---

Von Pischke (1978, p. 52) provides a particularly useful statement of the gains which may be achieved by linking savings with credit in rural finance projects:

Linking credit access to the existence of a deposit relationship with the borrower or prospective borrower is a useful device from several points of view. It encourages the intermediary to employ funds locally. It gives the potential borrower greater incentive to accumulate deposit balances. It reduces the lender's risk in two ways: the first is that savings accounts may be used to secure loans, and the second is that the lender acquires more knowledge of his customers by dealing with them as depositors than he would if the only relationship were with customers as borrowers. Linking savings and credit also helps to promote a continuous relationship between intermediary and customer, and the prospect of a continuous relationship gives each an incentive to treat the other party in a businesslike manner, and also reduces the lender's risk. Combining credit and deposit services helps to integrate rural financial markets, which may lead to more efficient intermediation.

Thus, it can be argued that deposit mobilization in general, and the linking of deposit and credit services in particular, may help promote customer relations between financial intermediaries and non-traditional clientele such as small farmers which are more viable in the long run. Given these potential gains, it is unfortunate that many group lending schemes contain no special provision for savings mobilization or improving deposit services. When group-schemes do incorporate a savings component, this is normally in the form of "compensating balance" requirements. For example, in the LLDP's group-scheme in Malawi, loans to groups (with a 10% interest charge) were secured by a compensating savings balance equal to 10% of the value of each loan (Schaefer-Kehnert 1983).

Concerning the use of compensating deposit balances as security for group loans, two points should be made. First, such compensating balances may not prevent the development of an extremely large excess demand for loans if the real interest rate charged is less than zero. Even if the interest rate earned on the compensating balances is itself less than zero, loans will still embody a subsidy if the loan interest rate is highly negative unless compensating balances are set at a high ratio to the value of loans—which defeats the presumed purpose of the program, namely, to increase the resources channeled to small farmers. Second, compensating balance requirements, while useful as a loan security device, are not the same thing as the use of deposit-relationships to develop viable customer relations with, or determine the creditworthiness of, *prospective* borrower-groups. The use of deposit-relations to sort out *potentially* viable borrower-

---

---

groups from non-viable ones is, at least analytically, distinct from the compensating balance issue.

An overly tight focus on compensating balances also may lead to a neglect of other potentially useful linkages between deposit services and group-credit. For example, individual members of borrower-groups which have proven themselves to be viable (based on prior deposit behavior and the repayment performance of the group) could be offered a premium on their deposit interest rate. This premium could operate as an incentive for individual group-members to continue participation in the group's collective actions (e.g., enforcement of joint liability) and thus help to maintain the cohesion of the group in the long run. Such uses of deposit balances as a criteria for selection of potentially viable borrower-groups, or as a mechanism for maintaining joint liability enforcement, are difficult to achieve if loan charges are unrealistically low—which limits the deposit interest which intermediaries can offer while providing an incentive for groups to form just to gain access to the credit subsidy.

Given the widespread existence of informal savings-credit groups such as ROSCAs in rural areas (Bouman 1977), it is surprising that more research has not been done on the potential integration of such informal groups into group lending schemes. For example, it would appear that an intermediary could economize on administrative costs by attracting deposits from a ROSCA-representative rather than individual ROSCA-members. The accumulation of deposit balances by the ROSCA could then be used as a criteria for the ROSCA's creditworthiness. (See Seibel (1985) for more detailed proposals concerning potential linkages between formal intermediaries and existing informal groups). Here again, the extremely concessionary loan interest charges in many group-schemes tend to prevent the development of such innovations by limiting the deposit interest and liquidity which intermediaries can profitably offer to informal groups. Also, risk-averse ROSCAs may be justifiably leery of placing deposits in intermediaries whose continued existence is dependent on uncertain inflows of government or donor funds.

The potential viability of linkages between informal finance and FFIs, and of linking savings with credit, is supported by a successful "pygmy deposit" scheme operated by the Syndicate Bank in India (Bhatt 1988). In this scheme, outside agents are hired to collect deposits at the homes of small savers on a regular, periodic schedule. Maintenance of scheduled deposit balances over a certain period is rewarded with access to credit. Bhatt (1988, p. 289) reports that the unit cost of pygmy deposits "has varied between 3 and 5% per annum, significantly lower than the cost of a three - to five - year fixed

---

---

deposit." Elsewhere, Oludimu (1982) analyzes data on deposit mobilization and credit allocation by cooperatives in Southwest Nigeria and finds not only that these cooperatives mobilize substantial deposits but also that their financial viability (as measured by realized surplus) is significantly correlated with member-savings.

In a suggestive comparison of the group-schemes run by the Grameen Bank in Bangladesh and the SFDP in Nepal, Mosley and Dahal (1987, p. 46) note that the Grameen Bank's scheme "requires members of borrower groups to contribute to voluntary savings and loan insurance schemes," while the SFDP-scheme did not. In addition, "repayment of loan installments, which in the SFDP is either monthly or half-yearly on the lender's premises, is in the Grameen Bank weekly on the borrower's premises" (Ibid). Some data on the two schemes are shown in Table 3. Note that although the Grameen Bank's scheme has higher administrative costs, its arrears rate is less than 1/7 of that for the SFDP-scheme. This may be partly due to the fact that borrower-groups were smaller in the Grameen Bank's program, as well as to the linkage of credit with savings and insurance schemes by the Grameen Bank — a linkage absent from the SFDP's program. The more decentralized method of loan collection under the Grameen Bank scheme — and the fact that "legal responsibility for loan repayment rests with one individual group member" (Ibid) rather than the group as a whole as in the SFDP-scheme—may also have been important factors contributing to the Grameen Bank's lower arrears rate.

Saito and Villanueva (1981) provide data on transaction costs for loans to small scale agriculture in the Philippines (see Table 4). They argue that "[one] reason for the relatively low administrative and default costs of rural banks may be the fact that many of them are owned and managed by those who were originally the local moneylenders" (p. 638). In interpreting the figures in Table 4, it should also be kept in mind that the rural banks provide loans to many borrowers who are rationed out of the portfolios of the development banks. While the rural banks entail an integration of informal moneylenders (rather than ROSCAs) into the formal financial system, their ability to compete effectively in the normally high-cost and high-risk activity of agricultural lending suggests that the integration of existing informal networks into group lending schemes may be a promising innovation.

## 6. Conclusion

Group lending programs are likely to be unsuccessful if they are designed merely as an alternative instrument for funneling cheap credit to small farmers. The long run viability

---

Table 3

ADMINISTRATIVE COSTS AND ARREARS RATE FOR TWO GROUP LENDING SCHEMES, 1984

	Grameen Bank, Bangladesh	SFDP, Nepal
Administrative Costs*	12.3	7.6
Arrears Rate**	1.6	11.7
Size of Borrower-Groups	5	11-15

(\*) As a percentage of total lent out.

(\*\*) As a percentage of total due loans.

Source: Mosley and Dahal (1987, p. 53).

Table 4

TRANSACTION COSTS AS A PERCENT OF OUTSTANDING LOANS TO SMALL SCALE AGRICULTURE IN THE PHILIPPINES

Lender	Administrative Costs	Default Risk Expenses	Total Transaction Costs
Rural Banks	3.5	2.0	5.5
Development Bank of the Philippines	3.9	3.4	7.3
Private Development Bank	3.0	3.2	6.2

Source: Saito and Villanueva (1981, p. 634)

of group lending schemes requires that lending institutions be able to: (1) cover their administrative and default costs, (2) mobilize the bulk of their funds through voluntary deposits, and (3) sort out viable borrower groups from those groups which are unlikely to enforce joint liability. These requirements all presume a realistic interest rate policy.

The long run viability of lending institutions is a pre-requisite for the expansion of formal financial services (including savings and credit services) to larger numbers of non-traditional clientele such as small farmers in rural areas. The savings and debt capacities of small farmers can be increased through access to higher quality financial services—

---

setting the stage for more viable customer relationships between formal lenders and small farmers in the long run. Group lending schemes need to incorporate improvements in the quality of savings services if they are to make a meaningful contribution to this process.

Existing group lending programs have often experienced operating losses and an underemphasis on savings mobilization due to restrictive interest rate controls. The costs incurred by lending institutions tend to be particularly high when the borrower groups are organized from above—especially when the lender is forced by bureaucratic controls (or the dictates of external funding sources) to extend its group loan portfolio at an overly-rapid rate. Although it is possible that voluntary formation of borrower groups may be preferable to the organization of groups from above—especially if lenders can monitor the prior deposit behavior of group members in determining creditworthiness—this itself presumes both a reasonable schedule for program expansion and a realistic interest rate policy. Otherwise, it may become impossible to sort out viable borrower groups from those which form on a temporary basis merely to gain access to cheap credit. In addition, there is a need for further research oriented toward discovering innovations which could improve the ability of lending institutions to gather and evaluate information on the savings capacities and creditworthiness of existing informal groups.

## References

- Adams, Dale W (1978) "The Economics of Loans to Informal Groups of Small Farmers in Developing Countries," Paper Presented at the Workshop on Rural Finance, Dacca, October 23-25.
- Adams, Dale W (1988) "The Conundrum of Successful Credit Projects in Floundering Rural Financial Markets," *Economic Development and Cultural Change* 36 (January), pp. 355-67.
- Adams, Dale W, and Alfredo Antonio Pablo Romero (1981) "Group Lending to the Rural Poor in the Dominican Republic: A Stunted Innovation," *Canadian Journal of Agricultural Economics* 29 (July), pp. 217-24.
- Arndt, H. W. (1982) "Two Kinds of Credit Rationing," *Banca Nazionale del Lavoro Quarterly Review* (December), pp. 417-25.
- Begashaw, Girma (1978) "The Economic Role of Traditional Savings and Credit Institutions in Ethiopia," *Savings and Development* 2, pp. 249-62.
- Bhatt, V.V. (1988) "On Financial Innovations and Credit Market Evolution," *World Development* 16 (February), pp. 281-92.
- Bouman, F. J. A. (1977) "Indigenous Savings and Credit Societies in the Third World: A Message," *Savings and Development* 1, pp. 181-209.
-



- 
- Bratton, Michael (1986) "Financing Smallholder Production: A Comparison of Individual and Group Credit Schemes in Zimbabwe," *Public Administration and Development* 6, pp. 115-32.
- Burkett, Paul, and Robert C. Vogel (1987) "Microeconomics of Financial Liberalization: Interest Rates, Transaction Costs, and Financial Savings," In, *Economic Reform and Stabilization in Latin America*, Claudio Gonzales-Vega and Michael Connolly, eds., New York: Praeger.
- Carter, Michael R. (1988) "Equilibrium Credit Rationing of Small Farm Agriculture," *Journal of Development Economics* 28 (April), pp. 83-103.
- Egger, Philippe (1986) "Banking for the Rural Poor: Lessons from Some Innovative Savings and Credit Schemes," *International Labour Review* 125 (July-August), pp. 447-62.
- Fishe, Raymond P. H. (1988) "An Economic Analysis of Group Lending Programmes in Developing Countries," Mimeo, Department of Economics, University of Miami, May.
- Fishe, Raymond P. H., and Robert C. Vogel (1988) "Implications of Deposit Insurance for Informal Financial Arrangements," Mimeo, Department of Economics, University of Miami, January.
- Gregory, Gregory L., and Dale W Adams (1987) "Agricultural Loan Recovery Problems in Bangladesh," Department of Agricultural Economics and Rural Sociology, Ohio State University, Mimeo.
- Miller, Calvin J., and Jerry R. Ladman (1983) "Factors Impeding Credit Use in Small-Farm Households in Bolivia," *Journal of Development Studies* 19 (July), pp. 522-38.
- Mosley, Paul (1986) "Risk, Insurance and Small Farm Credit in Developing Countries: A Policy Proposal", *Public Administration and Development* 6, pp. 309-19.
- Mosley, Paul, and Rudra Prasad Dahal (1985) "Lending to the Poorest: Early Lessons from the Small Farmers' Development Programme, Nepal," *Development Policy Review* 3, pp. 193-207.
- Mostey, Paul (1987) "Credit for the Rural Poor: A Comparison of Policy Experiments in Nepal and Bangladesh," *Manchester Papers on Development* 3 (July), pp. 45-59.
- Okonjo-Iweala, Ngozi (1982) "Developing Financial Institutions in Nigeria's Rural Areas: Some Farm-Household Perspectives," *Savings and Development* 6, pp. 169-96.
- Oludimu, Olufemi (1982) "Linking Saving With Credit: Agricultural Financing in S. W. Nigeria," *Savings and Development* 6, pp. 169-96.
- Owusu, Kwame Opoku, and William Tetteh (1982) "An Experiment in Agricultural Credit: The Small Farmer Group Lending Program in Ghana (1969-1980)," *Savings and Development* 6, pp. 67-84.
- Saito, Katrine Anderson, and Delano P. Villanueva (1981) "Transaction Costs of Credit to the Small-Scale Sector in the Philippines," *Economic Development and Cultural Change* 29 (April), pp. 631-40.
- Schaefer-Kehnert, Walter (1983) "Success with Group Lending in Malawi," In, *Rural Financial Markets in Developing Countries*, J. D. Von Pischke, Dale W Adams, and Gordon Donald, eds., Baltimore: Johns Hopkins University Press.
- Seibel, Hans Dieter (1985) "Saving for Development: A Linkage Model for Informal and Formal Financial Markets," *Quarterly Journal of International Agriculture* 24 (October-December), pp. 390-98.
- Vogel, Robert C. (1984) "Savings Mobilization: The Forgotten Half of Rural Finance," In, *Undermining Rural Development With Cheap Credit*, Dale W Adams, Douglas H. Graham, and J. D. Von Pischke, eds., Boulder:
-

---

Westview Press.

- Vogel, Robert C. and Paul Burkett (1986) "Deposit Mobilization in Developing Countries: The Importance of Reciprocity in Lending," *Journal of Developing Areas* 20 (July), pp. 425-38.
- Vogel, Robert C. and Paul Burkett (1986b) *Mobilizing Small-Scale Savings: Approaches, Costs, and Benefits*, The World Bank, Industry and Finance Series, Volume 15, July.
- Von Pischke, J. D. (1978) "Towards an Operational Approach to Savings for Rural Developers," *Savings and Development* 2, pp. 43-55.
- Von Pischke, J.D., and John Rouse (1983) "Selected Successful Experiences in Agricultural Credit and Rural Finance in Africa," *Savings and Development* 7, pp. 21-44.
- Wai, U Tun (1980) "The Role of Unorganized Financial Markets in Economic Development and in the Formulation of Monetary Policy," *Savings and Development* 4, pp. 259-65.
- Wieland, R. (1988) "A Summary of Case Studies of Group Lending and Cooperative Finance in LDCs," Mimeo, The World Bank, April.
- Youngjohns, B.J. (1980) "Agricultural Co-operatives and Credit," in, *Borrowers and Lenders*, J. Howell, ed., London: Overseas Development Institute.

## Abstract

*There has recently been an upsurge of interest in group lending as a method of providing credit to small farmers in developing countries. However, the implementation of group lending programs has tended to neglect important lessons obtainable from the failure of previous subsidized credit schemes and from informal finance. These lessons concern the importance of a realistic interest rate policy and savings mobilization, and the proper criteria for evaluating rural finance projects. The potential of group lending for developing rural financial markets can only be determined on the basis of these lessons.*

---

## LES PROGRAMMES DE "PRETS EN BLOC" ET LA FINANCE RURALE DANS LES PAYS EN DEVELOPPEMENT

### RESUME

*Malgré le récent renouveau d'intérêt pour les "prêts en bloc" comme méthode d'octroi de crédits aux petits agriculteurs dans les pays en développement, la mise en place de programmes de "prêts en bloc" tend à négliger les leçons importantes tirées tant de l'échec des pratiques antérieures de crédits subventionnés que de la finance informelle. Ces leçons invoquent l'importance d'une politique réaliste de taux d'intérêt et de mobilisation de l'épargne d'une part, et de critères appropriés pour l'évaluation de projets de financement rural d'autre part. La contribution potentielle de régimes de "prêts en bloc" au développement de marchés financiers ruraux ne peut être déterminée que sur la base de ces leçons.*



# Banking know-how. Help yourself.

*The experience of Cariplo - one of the major Italian banking groups - is at your disposal.*

*Its Head Office in Milan, Italy, is linked on-line with over 400 branches; abroad the powerful international expansion has taken Cariplo into the most strategically important financial centres, with branches in Hong Kong, London and New York and representative offices in Beijing, Brussels, Frankfurt, Madrid and Paris in addition to connections with 1,800 correspondent banks.*

*Therefore, all over the world, Cariplo's assistance and services are easily accessible for any type of banking, financial and commercial transactions.*

*It is logical to trust the competence of a great bank which, since 1823, has known how to move with the times.*



## **CARIPLO**

CASSA DI RISPARMIO DELLE PROVINCE LOMBARDE

## **We know how.**

Via Monte di Pietà, 8 - 20121 Milano  
Tel.: 02 88661 - Telex: 313010 CARIPL I



**INTERNATIONAL CENTER  
FOR PUBLIC ENTERPRISES  
IN DEVELOPING COUNTRIES**

**PUBLIC ENTERPRISE  
Quarterly Journal**

Vol.8, No.4 includes:

**Social Commitment and Efficiency Measurement in Indian Public Enterprises** - P.R. Sen-Gupta

**The Role of the Chamber of the Auditor General in the Audit of Public Enterprises in Sudan** - E.A. Musa

**The State as Entrepreneur in Ghana: An Analysis of the Challenge Posed by Private Entrepreneurship** - H. Akuoko-Frimpong

**Towards a Diagnostic and Prescriptive Model for Motivating the Nigerian Worker - A Study of Two Public Sector Organizations** - P.B. Johnnie

**The Public Enterprise Sector in the Philippines - Economic Contribution and Performance, 1975-1984** - R.G. Manasan et al.

**A Study on Female and Male Managers in Some Public Service Organizations in Nigeria** - G.U. Imanyi

**Ex Post Economic Efficiency of Public Enterprises: A Case of Manufacturing Public Enterprises in Nepal** - R. Adhikari

Vol.9, No.1 includes:

**Trends and Problems in the Introduction of New Technologies in the Wood Processing Industries of the Developing Countries** - A.V. Bassili

**Performance Evaluation of a Public Sector Development Bank Using the Development Function Criterion** - P.K. Jain

**Sources of Technical Efficiency in an African Context** - A. Abdouli

**Financing of Public Enterprises in India** - R.K. Mishra et al.

**Poor Returns and Low Generation of Funds in Indian Public Sector** - G.V. Chalam and D. Dakshinamurthy

**Reconciling Development Planning with Privatization: The Case of Jordan** - M.Q.A. Al-Quaryoty

**Comparative Case Studies of National and Private Companies** - D. Sikorski

**BOOKS WORTH READING**

**INDEX VOL.8**

---

Subscription Rates for Europe: one year USD 45, two years USD 80.

All ICPE publications can be ordered direct from ICPE, P.O.Box 92, 61 109 Ljubljana, Yugoslavia or through **LAVIS MARKETING**, 73 Lime Walk, Readington, Oxford OX3 7AD, U.K., tel. (0865)67575, tlx 83147 attn LAVMARK.

INTERNATIONAL REVIEW OF ECONOMICS AND BUSINESS

## Rivista Internazionale di Scienze Economiche e Commerciali

January 1990, Vol. XXXVII

V.S. VARTIKAR: Inflationary Price Controls - SIDNEY C. SUFRIN and J. SICILIANO: Multinational Institutions - A. AGLIARDI: Entry, Exit and Contestability - F. PIGLIARU: La domanda come vincolo alla crescita. Il caso dell'industria meridionale dei beni di consumo, 1963-83 - R.E. LOONEY: Political Change and Public Enterprise Performance: Argentina as a Case Study

February 1990, Vol. XXXVII

L.T. HOUMANIDIS: Marx and Keynes on Entrepreneurship - C. ANTONELLI: Profitability and Imitation in the Diffusion of Process Innovations - R. GIFT, W. MARXEN and J. McFADYEN: Dualism, Trade Theory, and the Interpretation of Industrial Structure - J.J. HISNANICK and K.O. KYMN: The Evaluation of the U.S. Manufacturing Sector Using Multifactor Inputs of Capital, Labor, Energy and Real Cash Balances - B. QUINTIERI and F.C. ROSATI: Government Spending and Labor Supply: An Expository Note - V. AKGIRAY, K. AYDOGAN and G.G. BOOTH: The Behaviour of Foreign Exchange Rates: The Turkish Experience

March 1990, Vol. XXXVII

I. MUSU: A Note on Optimal Accumulation and the Control of Environmental Quality - C. TISDELL: Market Transaction Costs and Transfer Pricing: Consequences for the Firm and for Technical Change - M. LINES: Stochastic Stability Considerations: A Nonlinear Example - C.C. LAI and W.Y. CHANG: Implications of the Burrows and Cebula Models on the Fleming Proposition - A.D. KARAYIANNIS: The Entrepreneurial Function in Economic Literature: A Synoptic Review - C. SPILLER, G. TONDINI, M.G. TOTOLA: L'impatto ambientale dell'attività turistica

*A monthly journal.* Subscription rate: Lire 150.000 (Italy); Lire 200.000 (abroad). - Complete set of back issues available (1954-1989). Address: R.I.S.E.C. - Via Teulic 1 - 20136 Milano (Italy).

NEW  
EDITION

## MOBILIZATION OF HOUSEHOLD SAVINGS A TOOL FOR DEVELOPMENT

*edited by Arnaldo Mauri*

pages 219

price Lire 20.000

available in English and French

For purchase, please address to:

**Finafrica Foundation**  
Via San Vigilio, 10 - 20142 Milano