Economics and Sociology
Occasional Paper No. 1351

INSTITUTIONAL CREDIT IN RURAL NIGER : LOW PERFORMANCE AND HIGH COSTS

by

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February, 1987

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ABSTRACT

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Paper documents nature and magnitude of transaction costs of rural credit in Niger. System is limited to input delivery role, lacking essential banking practices. Costs of the system are substantial, with largest share borne by the institutions involved. The system does not perform a meaningful role in resource allocation.

INSTITUTIONAL CREDIT IN RURAL NIGER : LOW PERFORMANCE AND HIGH COSTS

Transaction costs of credit are defined as all <u>non-interest costs</u> associated with loan transactions. This paper documents their nature and magnitude in the rural credit network of Niger. The first two sections provide a conceptual framework for the analysis of these costs, and outline the special features of the Nigerien credit system. The other sections of the paper present and discuss the roles performed, and the costs incurred by the different participants in the system.

Transaction Costs and Institutional Performance

The efficiency with which financial markets operate determines the magnitude of the contribution of this sector to development. Transaction costs are an appropriate measure of the degree of "friction" existing in the functioning of these markets. The higher the transaction costs of financial intermediation the less efficient the performance of financial markets, and the more constrained their contribution to development.

A "complete" financial system is comprised by surplus units (savers), deficit units (investors), and financial intermediaries. The latter play the role of mobilizing funds offered by savers and making them available to investors. All transaction between these participants in the financial system involve explicit prices (interest rates) and non-interest transaction costs.

Surplus units in the economy (depositors) incur search and information costs in selecting a depository institution, and further costs associated with performing transactions, i.e., deposits, withdrawals, and transfers of funds. Transaction costs incurred by financial intermediaries may be classified into costs of mobilizing funds and costs of lending. The former correspond to resources utilized in handling deposit accounts, documentation, record-keeping, and issuing statements. Costs of lending refer to costs associated with four stages: (a), loan evaluation and analysis; (b), loan disbursement; (c), monitoring of the borrower's investments; and (d), loan recovery. All four activities involved in lending are necessary to guarantee a good performance of the financial intermediary. Loan evaluation and loan recovery may be the two most critical stages of this process, but good record-keeping of disbursements and loan monitoring are still necessary to obtain satisfactory results. Each one of these four steps also represents transaction costs for the borrower. Forms must be filled out and documents must be supplied to the lender in the application process. Several trips to the bank's office may be necessary during the negotiation, disbursemnet, and repayment stages.

Transaction costs of lending in "conventional" credit systems in less-developed economies are usually high. Intermediation costs are particularly high in development banks operating in the rural areas of these economies[1]. The absence of appropriate means of transportation and communication in rural areas increases the costs incurred by lenders and borrowers. Financial regulations and complicated loan procedures associated with selective credit policies further augment the costs borne by financial intermediaries and rural borrowers. However, even in the absence of cumbersome loan-targeting schemes, the operation of a conventional credit system will imply transaction costs for all participants in the loan contract.

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[1] Several studies of transaction costs have been undertaken recently in Latin-America, the Caribbean, and Asia. Their results suggest that transaction costs for institutional lenders are in the order of 8 to 14 percent, i.e., several points higher than their usual operating margins. Transaction costs of borrowing fluctuate between 2 and 30 percent in different country studies. For lenders and borrowers, transaction costs vary widely depending on the complexity of the loan procedure.

The Rural Credit System of Niger

The major participants in the Nigerien rural credit system are: (a), the individual borrowers at the village level; (b), the "groupement mutualistes" (GMs) and cooperatives[2]; and (c), two institutions, the "Caisse Nationale de Crédit Agricole" (CNCA), and the "Union Nationale de Coopératives" (UNC)[3]. The CNCA is indeed the lending institution, whereas the UNC is the institution that deals directly with the cooperatives and GMs at the village level.

The institutional rural financial system of Niger is "incomplete" in two very important ways. First, even though rural savings exist, they are not mobilized by the institution lending to agriculture. Instead, this institution relies exclusively upon government funds and external support. Second, the institutional credit network dealing with agriculture does not operate as a conventional and well established credit system. Of the four stages of the loan procedure referred to above, loan disbursement is probably the only phase that could be considered in place. However, key record-keeping practices associated with disbursement are deficient. Evaluation and analysis of loan applications do not exist, and there is no systematic loan recovery efforts. In-kind loans are allocated among cooperatives, among "groupements mutualistes" (GMs), and among individual borrowers based on criteria that do not consider creditworthiness. This is partially due to the lack of appropriate records in the institutions involved, and the lack of sufficiently trained personnel to engage in this activity.

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[2] The GMs are village-level groups that comprise a cooperative.

[3] The institution dealing with input supply, the "Central d'Approvisionnement" (CA), plays an important role in the input delivery process, but it is not considered here as a part of the credit network.

Three major implications of the under-development of the institutional credit system in Niger can be outlined at this point. First, the system does not and cannot perform any meaningful resource allocation role through financial intermediation. Secondly, the system does not provide the financial intermediary with instruments of credit rationing in the presence of regulations, notably the fixed interest-rate structure prevailing in Niger. Third, as a loan delivery system the credit network of Niger should be a rather low cost operation. Existing procedures are simple and institutional resources are scarce, therefore the transaction costs associated with the system are expected to be low. However, as will be made clear in this paper, this should not be interpreted as an indicator of efficiency. Rather, these costs will be measuring the resource costs involved in operating an input delivery system, without the key components and functions of a complete credit system.

The assessment of the transaction costs associated with the system is undertaken at three levels: first, the individual borrower or household level, second, the leaders of GMs and cooperatives, and third, the UNC and the CNCA at their different levels of operation. The final section of this paper summarizes the major findings and draws the main implications for a re-structuring of the Nigerien rural financial system.

Transaction Costs of Borrowing at the Household Level

The findings reported in this section are based on a field survey undertaken in July-August 1985. The sample included some 900 households throughout the different regions of Niger. There were two predominant types of loans in the sample of 482 borrowers from institutions[4]: equipment loans with an average amount close to 132 thousand francs CFA, and seed loans averaging only about 1 thousand francs CFA[5]. The results discussed below refer to equipment loans, since seed loans consisted primarily of aid in kind distributed with minimum formalities.

Loan procedures were in general very simple for individual borrowers. There were no collateral requirements in any type of loan, but equipment loans would typically require a contribution or downpayment by the beneficiary. The loan was usually proposed or suggested to the borrower by someone else, rather than a result of the borrower's own initiative.

In a large majority of the cases the equipments and inputs had been received on time, and in satisfactory condition. However, an important shortcoming of the input delivery process was the lack of knowledge of the correct use of the inputs received. Furthermore, only 50 percent of these farmers acknowledged having received some training in the use of the equipment and tools received in credit.

The proportion of borrowers in the sample that recognized being delinquent in their payments was almost 37 percent. Among the borrowers of equipment loans, the number of delinquent loans represented 53 percent of the observations in that group. Insufficient revenues was the reason for non-repayment most frequently indicated by the farmers with loans overdue. Another important explanation however, was the lack of recovery efforts on the part of the credit institutions.

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[4] This sample of institutional borrowers is comprised by all interviews in the overall sample of 900 households that had received a loan in the five-year period preceding the date of the survey. A detailed description of the sample is included in Graham, Cuevas, and Negash (1986).

[5] 1 US$ = 330 francs CFA.

In summary, the loan procedure can be characterized as a relatively expeditious delivery system of credit in-kind. The major shortcomings of the system are insufficient training and technical assistance to the credit recipients, and poor loan recovery practices. The leaders of cooperatives and GMs appear to play an important role throughout the process, according to the individual borrowers. However, they seem to concentrate their efforts in the disbursement stage, neglecting the repayment function.

Even though all farmers are in principle members of a GM (hence, of a cooperative), the group itself does not perform a clear role in the operation of the system. There is no collective responsibility for the loans received, nor group pressure to repay or group support to those in arrears. The group appears to operate primarily as a meeting place to communicate the availability of credit and collect the names of interested villagers. These functions will certainly reduce transaction costs of borrowing, but will not improve the efficacy of the system as a resource allocation mechanism.

The measurement of transaction costs of borrowing at the household level considers two major components: first, the explicit expenses associated with traveling to other places to apply and negotiate the loan, receive the disbursements, and repay the loan, and second, the opportunity cost of the time spent in performing the activities involved in the different steps of the loan procedure. The opportunity cost of time was valued at 514 francs CFA per day[6].

The transaction costs of borrowing for the individual farmers are reported in Table 1. This table summarizes the costs incurred by the different participants

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[6] Estimated value added per day per active person, based in the figures of rural GDP per capita reported in Cuevas (1986), the proportion of active population over total derived from the 1977 census, and an estimated ratio of value added to GDP of 0.6.

in the credit system. The costs borne by individual farmers are rather low by most standards. One percent of the amount of the loan represents less than one-tenth of the usual interest rates charged on loans (11-13 percent). Studies conducted in other developing economies have found transaction costs equivalent to at least 30 percent of the explicit interest rate, and as high as twice the level of the lending rate. As suggested earlier, these low cost levels are reflecting the incipient development of the credit system, rather than a highly efficient operation. Most of these costs are generated at the disbursement stage, a finding that reinforces the impression that the Nigerien credit network performs primarily input delivery functions.

The results presented thus far suggest that individual farmers benefit from relatively low transaction costs of borrowing institutional loans. The simplicity of the input delivery system and the cost economies involved in operating through their group organizations explain these low transaction costs incurred by individual borrowers.

Transaction Costs at the GM and Cooperative Level

This section relies upon data obtained in interviews with the leadership of 24 cooperatives and 73 "groupements mutualistes" (GMs) carried out in January-February 1986. According to these interviews, the responsibility of deciding the distribution of credit among individuals was shared by the leaders of GMs, of the cooperatives, and by the representatives of the UNC. The CNCA, i..e., the lending institution, was perceived as playing a major role in these decisions in only 7 percent of the cases. Numerous criteria were indicated for allocating credit to the individual beneficiaries. The criteria most frequently cited by GM and cooperative leaders were the individual's ability to repay, the place in the list of applicants, and the ability to provide a deposit ("caution"). Less than half of the leaders interviewed were in possession of records indicating who was eligible for a loan among the members of the group. Only 18 percent of them had records or documentation indicating the amounts received by each farmer. These findings, consistent with the level of literacy documented in the survey, suggest that records about eligibility for credit and loan disbursements are kept "memorized" by the leaders of the organizations, rather than in written form.

The distribution of responsibilities in loan recovery were not clear. Most cooperative leaders felt that recovery was a role to be performed by the UNC official, whereas GM leaders attributed this function to the cooperative leaders. Basic information for loan recovery, i.e., debt records, existed in one-half of the cases.

The characteristics of the credit process at the GM and cooperative levels outlined above reinforce the notion that this credit network operates primarily as an input delivery channel. Input distribution appears to be performed with relative efficiency. The system fails in the areas of loan-allocation decisions, documentation of debts, and loan recovery. In all these areas responsibilities and roles are not clearly assigned, and essential records and documentation are absent or deficient. It is not surprising then that the costs of operating the system at this level are minimal, as shown in Table 1.

Overall, the low costs per CFA borrowed are demonstrating the advantages of group borrowing, i.e., of handling large (multiple) loans through the common leadership of the organization. The low cost per loan however, is indicating the lack of sophistication of the loan procedure. Moreover, it is reflecting the deficiencies of key loan allocation practices, the poor documentation of disbursements, and the limitations of loan recovery procedures.

Operational Costs of Lending at the Institutional Level

The field survey undertaken in January-February 1986 included interviews with 14 officials of the "Union Nationale de Coopératives" (UNC) and 5 branch managers of the "Caisse Nationale de Crédit Agricole" (CNCA). UNC officials devoted less than half of their time to credit-related activities, whereas CNCA personnel, as expected, was dedicated exclusively to perform their credit functions. This differences in the allocation of time were taken into account to compute the costs associated with credit activities.

It is evident from the figures presented in Table 1 that the institutions in question bear a large proportion of the costs associated with the credit delivery system. The CNCA alone shows operational costs per cooperative in the portfolio equivalent to 5.44 percent of the average loan amount per cooperative. The UNC activity at the arrondissement level also results in rather substantial operational costs of lending.

It must be noted that the costs reported in Table 1 do not include the expenses incurred at the central offices of the UNC and the CNCA. This implies that those costs still under-estimate the total transaction costs of operating the credit delivery system. Given the distribution of personnel of the CNCA between the central office (43 percent) and the branches (57 percent), one could assume an overhead of about 75 percent attributable to central-office expenses. With this assumption, the CNCA costs per CFA lent increase to 9.52 percent, and the combined costs of the CNCA and the UNC raise to almost 12 percent of the amounts lent.

Finally, it must be recalled here that the costs measured above for the CNCA correspond only to the non-interest costs of <u>loan administration</u>. These do not include the costs of funds (essentially determined by the BCEAO discount rates), or the <u>risk premium</u> or default cost. The latter reflects the effects of default risk on total transaction costs of lending of the institution.

For the CNCA, the risk premium was estimated at 25.6 percent, using an estimated default rate of 18 percent of the CNCA portfolio[7], the 9.5 percent administration costs reported above, and the preferential discount rate of the BCEAO as the cost of funds of 8 percent. This still represents a lower-bound estimate since no assumption has been made about the default risk involved in the loans granted to the government and to public and semi-public enterprises.

With loan administration costs of 9.5 percent and risk premium of 25.8 percent, total transaction costs of lending of the CNCA become 35.3 percent of the amounts lent. This is certainly a very high costs of lending, by any standards. This cost must be contrasted against the 2.5-percent margin allowed by the BCEAO for on-lending to the CNCA and other banks. The lending costs of the CNCA exceed by about 33 percent this regulated margin, i.e., the CNCA incurs losses of 33 percent of the amount of loans granted every year.

In summary, even though the credit delivery system of Niger does not include a complete set of well developed banking practices, the resulting costs of the system appear even higher than those recorded in development banks of other low-income countries. Even without devoting sufficient resources to key activities such as loan evaluation and loan recovery, the costs of implementing the delivery of inputs to the cooperatives and GMs are significant. The operations of the CNCA result in an annual loss equivalent to (at least) 33 percent of the funds lent by this institution. The following section will summarize the transaction costs

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[7] This default rate does not consider loans to government institutions and parastatals.

involved in the credit system for all participants, and will draw the major implications of these findings.

Summary and Implications

The total non-financial costs of operating the system are 9.14 percent of the amount of credit channeled from the institutions to the individual borrowers. If the estimated central-office costs of the CNCA are included in this estimate, total transaction costs per CFA in the credit delivery system increase to 13.22 percent. The largest share of these costs is borne by the participating institutions (86 percent of the total), i.e., the public sector is supporting the large majority of the costs of the credit delivery system. Credit beneficiaries have access to in-kind loans at low transaction costs, but the costs incurred by the institutions involved are significant.

This paper has shown that the institutional agricultural credit system of Niger is for the most part limited to the input delivery (credit disbursement) role. Despite the deficiencies of key lending practices the costs of the system are substantial. The major implications anticipated earlier in this paper can be restated and revised here. First, the system in its current state does not and cannot perform a resource allocation role through financial intermediation. Secondly, the system does not provide the financial intermediary with instruments of credit rationing. A serious effort towards the development of a viable rural financial system should be undertaken.

Table 1

Institutional Credit. Summary of Transaction Costs Incurred by Different Participants at Different Levels of the Credit Network

Level / Participant	Average Cost per Loan CFA	Average Loan Amount CFA	Cost per CFA %
Household Level			
Individual borrower	1,120.7	131,557.0	0.85
GM Level		604,583.9	
GM leaders	1,843.2		0.30
UNC, Arrondissement	2,823.3		0.47
UNC, Department	218.4		0.04
Sub-total GM level	4,884.9		0.81
Cooperative Level		1,659,960.8	
Cooperative leaders	1,969.6		0.12
UNC, Arrondissement	29,288.7		1.76
UNC, Department	2,699.4		0.16
CNCA, Department	90,238.5		5.44
Sub-total cooperative level	124,196.2		7.48
Total Transaction Costs per CFA[a]			**9.14**
Summary by participant:			
Individual borrower			0.85
GM and cooperative leaders			0.42
Institutions			
UNC			2.43
CNCA			5.44

Source: OSU Surveys, 1985 and 1986.

[a] Does not include costs of the central office of the CNCA. If these are considered the total cost per CFA increases to 13.22 percent.

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