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DEVELOPMENT FINANCE IN RURAL NIGER: STRUCTURAL DEFICIENCIES AND INSTITUTIONAL PERFORMANCE

by

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June 1988

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Development Finance in Rural Niger: Structural Deficiencies and Institutional Performance

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Introduction

The efficiency with which financial markets operate determines the magnitude of the contribution of this sector 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 transactions between these participants in the financial system involve explicit prices (interest rates) and non-interest transaction costs. 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.

Financial 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.[2]

A conventional credit system involves several activities in the loan process that require the use of real resources, and therefore generate costs. These activities can be classified into four major groups:

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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 can reach levels several points higher than their usual operating margins (see Cuevas, 1988).

2 Transaction costs of credit are defined here as all non-interest costs associated with loan transactions.

(a) Evaluation and analysis of loan applications
This stage comprises the gathering of information about the loan applicant, the assessing of the value of collateral, and/or the evaluation of the investments opportunities available to the prospective borrower.

(b) Loan disbursement
This involves making the funds available to the borrower, in cash or in kind, and recording and documenting the amounts disbursed.

(c) Monitoring
Usually this stage implies obtaining information about the performance of the borrower's investment. Monitoring is normally more important when loans are disbursed in several tranches, over an extended period of time. Technical assistance and supervision may be components of this stage.

(d) Repayment
The last step in credit transactions is loan recovery. A well defined system of repayment collection is essential to attain financial viability and maintain the size of the loan portfolio.

None of these activities is sufficient by itself to guarantee a good performance for the financial intermediary. Loan evaluation and loan recovery may be the two most critical stages of this process, but good record-keeping and monitoring are still necessary to obtain satisfactory results. All four steps in the lending process also represent transaction costs for the borrower. In a conventional credit system, the borrower must fill out forms and supply documents to the lender in the applications step. In addition, several trips to the bank office may be necessary during the negotiation, disbursement, and repayment stages.

This paper reviews and critically evaluates the major features of the rural credit system of Niger. The main components and under-developed nature of the rural credit network are discussed first, emphasizing the truncated role played by financial institutions in the system. Next, the characteristics and performance of the key rural credit institution, the "Caisse Nationale de Crédit Agricole" (CNCA), are described and analyzed. Finally, the magnitude and distribution of transaction costs in the credit network are documented, highlighting the disproportionate share of these costs borne by the institutions. Concluding remarks and implications follow.

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 "groupements mutualistes" (GMs) and cooperatives[3]; and (c), two institutions, the "Caisse Nationale de Crédit Agricole" (CNCA), and the "Union Nationale de Coopératives" (UNC)[4]. 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.

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.

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3 The GMs are village-level groups that comprise a cooperative.

4 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.

The "Caisse Nationale de Crédit Agricole" (CNCA): History and Performance

For almost 20 years the CNCA has carried out the function of channeling funds, for the most part indirectly through parastatal organizations, towards the Nigerien rural-sector. The CNCA was created originally as a division of the "Union Nationale de Crédit et de Coopération" (UNCC). The UNCC had been established to provide greater central control over cooperatives and through time had taken on a variety of functions from input supply, to credit distribution, peanut marketing, seed distribution, the management of development projects, cooperative education, farmer training, functional literacy, supplying products of primary necessity, and distributing grain in time of scarcity. Some of these functions were subsequently transferred to other specialized parastatal agencies, as in the case of the grain marketing agency, i.e. the "Office des Produits Vivriers du Niger" (OPVN), established in 1970; the "Office National des Aménagements Hydro-Agricoles" (ONAHA), the irrigation authority established in 1978; or to specialized services still within the UNCC, like the "Centrale d'Approvisionnement" (CA), the input supply agency, created in 1978 and the "Ateliers de Fabrication de Matériel Agricole," (the agricultural equipment workshops).

When the credit function was passed over to the CNCA, strong links were maintained. For example, by law the chairman and the members of the board of the UNCC were respectively the chairman and members of the board of the CNCA. From a functional point of view, the representative of each agency at the regional level was one and the same until 1980, when the government took a firmer stand in trying to set up the CNCA as a full-fledged "agricultural credit institution." The CNCA, however, continues to rely heavily on the parastatal agencies both as a device for indirectly channeling credit to farmers and to perform some critical functions in identifying, selecting and monitoring its own direct customers. Transferring the credit function to the CNCA did not automatically create the necessary banking skills nor were the extension and follow-up skills of the parastatal agencies improved to perform these functions. On the contrary, incentives were created that made the situation worse on both fronts.

The CNCA, trapped by its mission, could not afford to establish contact with many of its ultimate borrowers in the rural areas. The CNCA's role of working through other institutions to reach the final farm-borrower reduced its chances of learning how to perform effectively its own banking functions. It could not develop direct "bank-customer" relationships. From the point of view of learning processes within the CNCA the situation worsened when large scale Productivity Projects (PPs) entered the scene. The predefined goals embedded in the PPs programs and prescriptions erected a strong barrier to any attempt by an external institution, like the CNCA, to understand and much less participate in the loan evaluation and loan administration activity where these projects operated. In short the CNCA became a mere conduit to channel funds rather than actively participating in the decision making process in assessing the risk, and credit worthiness of potential clients.

The parastatal agencies (PAs) and the productivity projects (PPs), on the other hand, find in this situation incentives to reduce the quality of their own performance both with regard to the supporting services offered to the CNCA and in their own current operations. First, transferring loans from their books to the CNCA obviously reduced the concern and responsibility shown by their own agents in assessing the creditworthiness, follow-up activities and credit collection on behalf of the CNCA. Second, the opportunity to influence credit allocation and loan repayment created for the PA's and the PP's a situation in which the negative effects of their own, possibly inappropriate, technological advice and even fraud can be temporarily covered up with resources borrowed directly by them or by their project farmers. The distribution of these loan resources can mitigate the losses growing out of poor research and extension work and reduce the complaints of the farmer-borrowers if they do not have to be repaid. In short, as long as the loan program is labelled "experimental" and the experiment proves deficient, then the PA's and PP's can save face with their farmer-borrower by not pushing aggressively for loan repayment.

Thus, paradoxically, recourse by the CNCA to the PA's and PP's for supporting services in credit delivery and loan repayment can result in creating incentives and opportunities for the same entities to work against rather than in support of loan repayment. This is to be expected when the same entity that is a borrower (i.e. the PA's and PP's) also assumes a role as a credit officer and loan collection agent for another entity which is its creditor such as the CNCA. The conflict of interest inherent in these split roles weakens and eventually destroys rigorous loan management and loan recovery practices. Thus the CNCA is defenseless because it has very limited control over the resources it lends.

In this framework the financial entity is not considered an intrinsically useful institution in its own right, but rather a mere administrative device completely subordinated to the purpose of channelling credit toward predefined targeted uses. These uses are not chosen by loan beneficiaries, but by a development agency whose task is to stimulate the adoption of specific technologies or practices to increase output. Such an approach does not provide the incentives to develop within the financial institution the appropriate managerial and banking skills, needed to administer a loan portfolio and develop through and a healthy bank-client relationship.

Liability Management: Instability and Vulnerability.

The growth and change of liabilities of the CNCA is reported in Tables 1 and 2. Selected liabilities in Table 1 identify the large share of total funds borrowed through the government and foreign donors. The variability of the rate of growth is very marked among these important types of liabilities. This is explained by the very narrow base for change and by the concentration of funding sources. This extreme instability and lack of diversification of funding sources also affects the aggregate rate of change and, eventually, the overall rate of growth for the institution.

The Central Bank's rediscount lines accounted for 44.7 percent of total borrowing, on average, over the period, while fixed-term deposits (mostly from the Treasury) and external lines of credit from international donors, under very soft conditions, accounted respectively for 22.8 percent and 20.1 percent on average. At the end of 1983-84 these sources (3 in all) accounted for 90.59 percent of the CNCA's borrowed funds.

The CNCA's composition of borrowed funds does not stimulate the development of the skills and procedures required to approach the general public for deposit collection. Nor does the CNCA benefit from the incentives that dealing with regular depositors from the public creates in order to improve banking skills and other operating procedures such as effective loan evaluation and risk analysis, liquidity and cash management, and loan recovery practices.

In summary, when the structure of liabilities of a financial institution servicing agriculture is dominated by government rediscount lines of credit or international donor funds, the institution becomes "borrower-dominated". Namely, all the loan procedures and administrative practices are designed to favor borrower's interest. Detailed farm budget studies and targeted clientele are emphasized (to introduce new technology or increase output while rigorous credit-worthy analyses on the probability of loan repayment and loan recovery procedures and practices are minimized.

In contrast, when the liability portfolio is dominated by deposits from the public at large, the institution becomes "depositor-dominated" in its operational philosophy. Loan management and administrative procedures are designed to favor and protect depositors interests. High-cost loan-targeting programs are minimized, while loan evaluation and credit-worthiness analyses (including risk analyses) are emphasized. At the same time loan recovery procedures are highlighted and loan recovery efforts are pursued aggressively. Borrower-dominated financial institutions frequently experience severe financial difficulties since financial viability is not a dominant priority. Depositor-dominated financial institutions, on the other hand, are usually much more solvent, since the survival of the financial institution is important for depositors interests and thus institutional viability rapidly becomes a dominant feature of managerial strategy. As the foregoing analyses make clear, the structure of liabilities (sources of funds) of the CNCA makes it a classic example of a borrower-dominated institution, dependent upon government and donor funds, with all the associated weaknesses of those institutions, in particular its lack of financial viability.

Asset Management: Portfolio Structure and Performance

The portfolio of financial assets of the CNCA - 99 percent of which consists of loans and overdrafts - recorded an average annual growth of 17.6 percent over the period 1979/80 - 1983/84 (including doubtful loans net of loss provisions). The average rate of growth over the same period, excluding doubtful loans (see Table 2), was 16.9 percent for overdrafts, 23.1 percent for short term loans and 25.7 percent for medium-term loans. The rates of growth for each type of loan are extremely variable over time because of unstable seasonality coupled with end-of-period data and because of the very high concentration of borrowing entities. Abrupt shifts in program funding through government and international sources (noted earlier in Table 1) introduces equally abrupt shifts in assets. Starting in 1983/84 and continuing in 1984/85 Table 2 panel A shows a negative rate of change for all types of loans. These rapid shifts in liabilities and assets complicate loan management practices and compromise efficient loan recovery. For example, farm-borrowers (or cooperatives) are not inclined to repay loans to an institution experiencing abrupt funding problems, since the reward for repaying a loan (i.e. getting a new loan) appears unlikely. Thus a growing image of instability in funding sources will induce a rising rate of delinquent behavior among borrowers.

Seventy percent of the CNCA loan portfolio consists of overdrafts and short-term loans while 30 percent is comprised of medium term loans in 1983/84 (see Table 2 Panel B). Overdrafts fall into five main groups (see Table 3). Crop loans until 1983-84 consisted mostly of loans to OPVN, the grain marketing agency, and, to a much smaller degree, to "Riz du Niger" and "SONARA" (rice and peanut marketing parastatals); input supply loans mostly to the "Central d'Approvisionnement"; prefinancing loans mainly for Productivity Projects, (i.e. credit granted as an advance on the expected disbursement of lines of credit obtained from external donors or the "Fonds National d'Investissement"); advances to ONAHA (the Irrigation Authority) directly and to some irrigation projects; and other advances on current account to Productivity Projects.

Medium-term loans accounted for 46 percent of the number and 28 percent of the value of total loans outstanding at the end of 1984/85 (46 percent and 30 percent respectively at the end of 1983/84). An important although decreasing proportion of these loans (35 percent at the end of 1983-84 and 19 percent at the end of 1984/85) is accounted for by the consolidation of loans granted to crop marketing agencies, like OPVN, SONARA, Riz du Niger, and by one loan granted to the Nigieren Government (on which no interest is accruing according to the notes to the financial statement for 1983-84). The rest of the medium-term portfolio is represented by loans to cooperatives and to individuals (65 percent and 16.5 percent at the end of 1984/85; and 50 percent and 14.8 percent at the end of 1983-84). The main stated destination of loans in the case of cooperatives is the acquisition of collective farm equipment especially within the Productivity Projects. Other stated purposes for individual loans are preparation and planting of orchards, cattle herd reconstitution, seed storage (mainly for groundnuts). The value of the average upstanding loan to cooperatives of medium-term maturity was CFAF 2.2 M at the end of 1984-85 (CFAF 1.9 M at the end of 1983-84)

From the above it can be seen that the bulk of retail lending by the CNCA, i.e., loans directly granted to cooperatives and individuals, is concentrated in short-and medium-terms loans (see Table 3). However, as already mentioned, the proportion of these loans to the total value of loans outstanding is insignificant except for medium-term credit to cooperatives. The average amount per loan is so low - especially for short-term loans- that it is difficult to assume that the net interest margin is sufficient to cover operating costs. If, for example, the cost of funds is assumed to be equal to the preferential rediscount rate, this margin is fixed at 2.5 per cent, inclusive of commissions, for all loans to cooperatives. This means CFAF 2.500 annually on a loan for CFAF 100,000, which represents a cost of about 3 man/hours of work time valued at the average cost of personnel for the CNCA. Clearly more time is spent processing these loans, even in the imperfect loan delivery system within the CNCA and its associated parastatal institutions[5]. A larger interest rate margin to cover these operational costs and risk is clearly in order.

It is evident that the quality of the loan portfolio of the CNCA has been steadily deteriorating over the years. The CNCA reports as doubtful only those loans granted to individuals and

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5 Transaction costs of lending are evaluated in the following section.

cooperatives because it considers all other loans granted to or guaranteed by the Nigerien Government as secure. For example no provision for loan losses has been accumulated for loans extended to the parastatal agencies for crop and input supply loans, for irrigation project loans to ONAHA, and for prefinancing loans, although many of these loans are clearly non-performing.

The data for doubtful loans reported in column 5 and 6 in Table 3 therefore refer only to loans to cooperatives and individuals. The CNCA has recently increased the loss provision against these loans and considers 100 percent of the short-term credit to cooperatives and 50 percent of the short and medium-term credit to individuals as "not recoverable." If we accept, for the moment, this unrealistically narrow definition of non-performing loans, only 8.7 percent of the total loan portfolio was considered doubtful, and adjusted accordingly with increased loan loss provisions at the end of 1984-85 (4 percent for 1983-84). An alternative, and more realistic, appraisal of the doubtful loan percentage would consider a substantial part of the loans to government parastatals as equally doubtful as those recently written off for cooperatives and individuals. Thus the misleadingly low 8.7 percent estimate in Table 3 could very easily be adjusted upwards to something approaching a substantial majority of the total portfolio.

In this situation the stability of the institution is undermined in many ways. On the one hand, the absence of loan turnover creates great difficulties for the liquidity of the CNCA while, on the other hand, profitability is at stake both because of the increased cost of funds prompted by the liquidity crisis and due to the lost interest income and the loss in the value of assets. These effects can only be hidden partially by accounting practices.

Profitability.

The assessment of the CNCA's profitability depends critically on judgments concerning the real value of its assets and of accrued interest. Data on Revenues, Costs and Profits Margins are set forth in table 4 for the period 1978/79 to 1983/84. Positive net profit and profit margins are evident in this data throughout the period (lines 9 and 10). These data can be taken at face value only if one has confidence in the data recorded as income from financial operations (line 1) and provisions for loan losses (line 4).

The incidence of extraordinary items in line 8 is related to the need to take into consideration profit and loss items that escaped appropriate reporting in previous accounting periods. This item reflects the difficulty of measuring the performance of the CNCA. Relevant factors increasing this item are the inefficiency of the CNCA's information system and the dispute surrounding the relationship between the CNCA and some of its important parastatal clients.

In summary, the profit margin set forth in line 10, shows a trend of declining profits in recent years reflecting the deterioration of the CNCA's portfolio. However these findings are, in fact, greatly misleading in that actual profits (in contrast to accounting profits) are clearly non-existent. One must not forget that the item "income from financial operations" in line 1 forms the basis for estimating the profit estimates in line 9 and the profit ratio in line 10. Theses estimates are based on "accrued" interest, a conventional accounting term that considers all the hypothetical (but unpaid) interest earnings for delinquent loans to all the parastatal agencies as revenue, since it is accruing on the books of the CNCA. If, instead, one were to use actual interest payments received to estimate interest revenue, then the CNCA would be recording losses instead of profits and the trends, noted above, would be increased losses rather than declining profits.

Transaction Costs in the Credit Delivery System

The assessment of the transaction costs associated with the CNCA credit network 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 magnitudes of transaction costs for all three levels are summarized in Table 5

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[6]: equipment loans with an average amount close to 132 thousand francs CFA, and seed loans averaging only about 1 thousand francs CFA[7]. The results discussed below refer to equipment loans, since seed loans consisted primarily of aid in kind distributed with minimum formalities.

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6 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).

7 1 US$ = 330 francs CFA.

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 (UNC agent, cooperative official, etc.), rather than an outgrowth of the borrower's own initiative.

In a large majority of cases the equipment 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 as credit in kind.

Thirty seven percent of the borrowers in the sample admitted to being delinquent in their payments. Among the borrowers of equipment loans, 53 percent admitted to a delinquent status. Insufficient revenues was the reason for non-repayment most frequently indicated by the farmers with overdue loans. Another important explanation however, was the lack of recovery efforts on the part of the credit institutions.

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 for the borrowers, 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 on 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 for 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 for 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[8].

The transaction costs of borrowing for the individual farmers are reported in Table 5. 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 reflect 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 alone.

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 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

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8 Estimated value added per day per active person, based in the figures of rural GDP per capita reported in Cuevas (1987), the proportion of active population over total derived from the 1977 census, and an estimated ratio of value added to GDP of 0.6.

disbursements are kept in "memorized" form 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 only 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 5.

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.

<u>Operational Costs of Lending at the Institutional Level</u>

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, were dedicated exclusively to perform their credit functions. These 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 5 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 5 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 loan administration. These do not include the costs of funds (essentially determined by the BCEAO discount rates), or the risk premium 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[9], 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 a 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.

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9 This default rate does not consider loans to government institutions and parastatals.

Concluding Remarks and Implications

The deteriorating performance of the CNCA in recent years can be largely traced to poor loan management procedures and practices and to an operational philosophy that prevents the institution from maturing sufficiently to play a relatively "autonomous" role as a true intermediary. The institution has been forced to channel its loan funds to final borrowers on the basis of loan evaluation actions carried out by employees of other organizations. It has been compromised, further, in having these same agents of other parastatal organizations undertake loan recovery efforts on its behalf. In short, in being relegated to a wholesaling role, it has not been able to act as a bank with a staff acquiring on-site loan evaluation, risk management, and loan recovery skills.

The instability of funding sources in the structure of liabilities of the CNCA also introduces uncertainty into the CNCA's loan programs and complicates loan administration. Furthermore, with all funding coming from international donors or the government's rediscount lines, the CNCA has become a "borrower-dominated" institution. Its organizational framework has created incentives to promote procedures and practices favoring borrower's interests. Targeting criteria to reach selected farmers with new inputs is emphasized, while creditworthiness, risk analysis and loan recovery procedures and efforts are minimized. The financial viability of the institution is not an overriding priority. Continual infusions of funds have been needed to subsidize the high lending costs associated with the expensive delivery of loans through an incomplete "truncated" credit system experiencing growing default rates.

Total non-financial costs of operating the CNCA credit system are 9.14 percent of the amount of credit channeled from the institution 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, i.e., risk management, autonomous loan evaluation, and overall portfolio management. A serious and focused effort at institutional autonomy is necessary before the CNCA can become viable and the rural credit system a self-sustaining, permanent institution in Niger.

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TABLE 1

Annual Change and Percentage Composition of CNCA Liabilities 1979-80 to 1983-84

	1979-80 (1)	1980-81 (2)	1981-82 (3)	1982-83 (4)	1983-84 (5)
	A. Annual Percentage Change				
Liabilities					
Central Bank	4.01	- 0.73	15.32	67.51	- 25.17
Checking Accounts	208.20	5.80	273.52	- 23.03	- 15.90
Current Accounts	64.18	352.02	- 45.81	- 4.66	27.75
Banks & Correspondents	236.64	54.58	- 24.39	- 66.43	-100.00
Fixed Term Deposits	126.52	- 17.48	17.46	- 9.51	- 8.87
Ext. Lines of Credit	270.20	39.01	- 10.27	18.52	13.73
Total	60.2	10.3	- 9.7	49.3	14.3
	B. Percentage Composition				
Central Bank	42.5	38.3	40.2	54.8	47.9
Checking Accounts	2.7	2.6	8.8	5.5	5.4
Current Accounts	1.7	7.0	3.5	2.7	4.1
Banks & Correspondents	4.9	6.9	4.7	1.3	---
Fixed Term Deposits	30.2	22.6	24.3	17.8	18.9
Ext. Lines of Credit	17.9	22.6	18.5	17.9	23.7

SOURCE: CNCA, Rapport d'Activite, 1982/83 and 1983/84.

TABLE 2

Annual Change and Percentage Composition of the Financial Assets of the CNCA
1978/79 to 1984/85

	1978/79 (1)	1979/80 (2)	1980/81 (3)	1981/82 (4)	1982/83 (5)	1983/84 (6)	1984/85 (7)
Financial Assets							
			A. Annual Percentage Change				
Cash, CCP, Central Bank	----	- 57.5	541.0	- 78.0	112.7	- 21.9	----
Banks & Correspondents	----	119.6	37.8	- 96.0	284.3	349.5	----
Overdrafts	----	37.8	5.5	21.0	36.4	- 16.1	- 5.6
Short-term Loans	----	- 30.6	155.9	- 10.6	14.4	- 13.8	-80.8
Medium-term Loans	----	111.9	18.1	- 0.9	3.5	- 4.0	-23.8
Doubtful Loans *less* Provisions	----	----	29.2	66.2	- 63.9	-100.0	----
Total	----	52.9	13.3	10.8	24.0	- 12.9	----
			B. Percentage Composition				
Cash, CCP, Central Bank	0.4	0.1	0.7	0.1	0.2	0.2	----
Banks & Correspondents	0.6	0.9	1.0	0.04	0.1	0.6	----
Overdrafts	69.7	62.8	58.5	63.9	70.3	67.7	----
Short-term Loans	3.5	1.6	3.6	2.9	2.6	2.6	----
Medium-term Loans	24.3	33.7	35.1	31.4	26.2	28.9	----
Doubtful Loans *less* Provisions	1.5	1.0	1.1	1.6	0.5	----	----

SOURCE: CNCA, Rapport d'Activite, 1982/83 and 1983/84 and unpublished data in CNCA files for 1984/85.

TABLE 3

Distribution of Loans by Type of Beneficiary, Term Structure, and Selected Attecors Indicators for the CNCA Credit Portfolio 1984-85

Beneficiaries	Number of Accounts		Amount Outstanding (000,000 CFA)		Doubtful Loans (000,000 CFA)		Doubtful Loans (%)	
Date	30.9.84 (1)	30.9.85 (2)	30.9.84 (3)	30.9.85 (4)	30.9.84 (5)	30.9.85 (6)	30.9.84 (7)	30.9.85 (8)
Medium - Term								
Cooperatives	1.160	1.160	2299.4	2531.8	31.4	362.3	1.37	14.31
OSEMs	5	5	596.3	383.0	----	-----	----	-----
State	1	1	1016.1	338.2	----	-----	----	-----
Individuals	3.219	3.219	665.2	641.0	300.2	298.3	45.13	46.54
Short - Term								
Cooperatives	1.548	1.548	208.7	256.3	10.8	256.3	5.13	100.00
Individuals	3.396	3.396	202.0	143.5	74.8	69.7	37.13	48.58
Overdrafts								
Crop loans	2	1	2522.2	150.9	----	-----	----	----
Input supply	5	5	2629.0	3430.3	----	-----	----	----
Prefinancing	16	16	762.9	567.1	----	-----	----	----
Advances ONAHA and AHA	43	43	2072.7	2390.9	----	-----	----	----
Other Advances on c/a	111	111	2164.8	3084.9	189.3	220.0	8.74	7.13
Total	9506	9505	15199.4	13918.0	606.7	1206.7	3.99	8.67

SOURCE: CNCA, Rapport d'Activite, 1982/83 and 1983/84 and unpublished data from CNCA files.

TABLE 4

Revenues, Costs, and Profit Margins for the CNCA
1978/7 to 1983/4
(in millions of CFA Frances)

	1978/79 (1)	1979/80 (2)	1980/81 (3)	1981/82 (4)	1982/83 (5)	1983/84 (6)
1. Income from Financial Operations	537.5	1030.8	1281.5	1664.0	2230.6	1899.5
2. Charges on CNCA Borrowings	282.5	537.9	682.5	1053.6	1486.3	1001.5
3. Gross Margin on Financial Intermediation	255.0	492.9	599.0	610.4	744.3	898.0
4. Provisions for Loan Losses	42.6	80.0	217.9	159.6	222.5	360.8
5. Net Margin on Financial Intermediation	212.4	412.9	391.1	450.8	521.8	537.2
6. Operational Costs	165.5	181.4	308.9	291.0	324.9	285.2
7. Operating Margin	46.9	231.5	72.2	159.8	196.9	252.0
8. Extraordinary Items	-6.1	-15.0	+78.7	-19.8	+3.7	-65.1
9. Net Profit	40.8	216.5	150.9	140.0	200.6	186.9
10. Profit Margin (%)*	7.6	21.0	11.8	8.4	9.0	9.8

* Net profit/Income from financial operations (Col. 9/Col. 1).

SOURCE: CNCA, Rapport d'Activite, 1982/83 and 1983/84.

TABLE 5

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.