

NIGERIAN VILLAGE MONEY LENDERS AND THEIR USURIOUS INTEREST RATES: AN ANALYSIS OF INTERVENING FACTORS

E. C. Eboh
O. Ugama
O. Okereke
University of Nigeria

1. Introduction

Attempts by successive Nigerian governments to increase the flow of institutional credit to smallholders in rural areas have achieved minimal successes. The twin goals of increased agricultural production and improved smallholders' incomes have therefore been constrained by the scarcity of credit. Several factors have been blamed for this situation. Okorie (1988) indicted the rural banking scheme for its lack of rural bias in ownership, operations and functioning. It is also believed that there exists some form of socioeconomic and psychological distance between the institutional credit agencies and the small farmer (Okorie, 1990). The situation is further worsened by farmers' illiteracy, cumbersomeness of loan application procedure and delays in loan approval and delivery.

Meanwhile, the credit requirements of small farmers had increased, partly because of the increased adoption of improved technologies and partly because of rising costs. As agriculture becomes improved the farmer combines his labour with more capital in the form of simple machines, improved seeds and/or cuttings, fertilizer, herbicides and pesticides. This results to remarkable increase in the ratio of purchased inputs to total inputs. However, because of farmers' poor cash-capital base, most would need external assistance in form of loans. Since they (the small farmers) have limited access to institutional credit, many depend on informal money markets.

The informal money markets in many Nigerian villages are characterised by the existence of private money lenders. One major problem facing those who borrow from them is their high rates of interest relative to institutional interest rates. Interest rates charged by private money lenders have variously been described as "usurious", "exploitative", "exorbitant", "unrealistic", "regressive" and "antidevelopmental" (Ijere, 1975; Ghose, 1980; Borroah, 1980; Basu, 1984 and Saleem, 1987).

These negative commentaries are apparently based on the notion that the private money lender is more or less monopolistic in operations and functioning. According to this viewpoint, the high interest rates are a reflection of the money lender's monopoly profit. It is also argued that this profiteering tendency is often over-stretched to the detriment of borrowers who except in very few cases have no more accessible credit market other than the money lender. Some theorists however disagree and contend that high interest rates are caused by high lender's risk of default, high opportunity costs of funds and high costs of loan administration (Bottomley, 1964).

This paper seeks to empirically verify these factors and their relative explanatory

strengths as determinants of the interest rate charged by the money lender. A sound understanding of these factors and their interplay would engender greater policy capabilities for alleviating the appalling credit conditions in Nigerian villages.

2. Theoretical Issues and Study Model

There are two alternative theoretical arguments which attempt to explain the factors responsible for the high interest rates charged by private money lenders. They are the lender's risk hypothesis and the theory of collateral undervaluation.

The lender's risk hypothesis posits that high interest rates are caused by high lender's risk of default, high opportunity costs and high administrative costs (Wai, 1958; Bottomley, 1963a; 1963b; 1964). The ingredients of the argument are as follows:

- i) that a village money lender faces a substantial risk of default especially where suitable collaterals are scarce;
- ii) that there is severe shortage of loanable funds relative to the amount in demand and that under such supply deficits, price (i.e., rate of interest) of loan would increase; and
- iii) that the cost of administering loans to small borrowers scattered in different locations is high.

On the other hand, the theory of collateral undervaluation posits that the monopoly position of private money lenders is the cause of high interest rates. This proposition hinges on the following conditions:

- i) that credit transactions are usually personalized, with the lender having an intimate knowledge of the borrower;
 - ii) that the lender uses his intimate knowledge to assess borrower's credit worthiness, accept collaterals which may be unacceptable in the formal credit market and enforce credit arrangements; and
 - iii) that the isolated nature of the markets coupled with the powerful bargaining position of the lender enables him (the lender) to undervalue collaterals in relation to the loan amount, with the aim of appropriating the collateral in event of default (Basu, 1983; 1984).
-

3. The Study Model

The lender's risk hypothesis and the theory of collateral undervaluation are incorporated into a single model for the purpose of evaluating their roles in determining the behaviour of money lenders as it affects interest rates. An analysis similar to the present one was done by Saleem (1987) - a study of interest rate determination in some rural credit markets of Sudan. The model used in that analysis has been adopted and adapted for this present analysis. Let the model used here be called "Modified Saleem's Model (MSM)".

The modified Saleem's Model is explained as follows. A borrower (farmer) pledges a certain amount of standing crops at a stipulated price known as "credit price" (P^s) and the lender sells the quantity pledged at harvest time at the harvest market price (P^h). Thus the implicit "own" rate of interest (r) may be defined as:

$$r = \frac{P^h}{P^s} - 1$$

where $P^h > P^s$, for r to be positive.

Thereafter the corresponding average monthly compounding rate (R) is given by:

$$R = (1 + r)^{\frac{1}{n}} - 1$$

where n is the duration of loan in months.

Prior to the determination of "credit price", both the money lender and borrower agree on an expected harvest market price. The money lender would use his stronger bargaining power to enforce a negotiated harvest price (P^m) set well below his anticipated harvest market price. The extent of collateral undervaluation (4) may therefore be represented as:

$$u = \frac{P^m}{P^h} \quad \text{where } 0 < u < 1.$$

Thus, the smaller P^m is relative to P^h , the greater the degree of undervaluation.

Given P^m , then P^s can be expressed as:

$$P^s = a P^m \quad \text{where } 0 < a < 1$$

and where a is interpreted in terms of (i) opportunity cost of funds, (ii) lender's risk premium. Under the first interpretation, p^s can be constructed as:

$$p^s = \frac{1}{(1 + d)} p^m \quad \text{where } d \text{ is opportunity cost of fund.}$$

Comparatively, under the second interpretation,

$$p^s = \frac{(1 - q)}{(1 + d)} p^m \quad \text{where } q \text{ represents the lender's risk premium (pro-}$$

portion of each unit of loan that is defaulted).

On the basis of the foregoing, the implicit "own" rate of interest (r) may be defined as:

$$r = \left\{ \frac{(1 + d)}{(1 - q)} \right\} (u) - 1$$

In Saleem's analysis, $r = f(d, q, m)$ so that $m = r - f(d, q)$ where m denotes the unit monopoly profit. But in the present analysis, administrative cost (c) is introduced, so that $r = f(d, q, c, m)$ and $m = r - f(d, q, c)$. The objective of the modification is to sieve out administrative costs from Saleem's monopoly profit and so arrive at an equation in which administrative cost has been discounted. Thus, the relevant version of implicit "own" interest rate equation is:

$$r = \left\{ \frac{(1 + d)}{(1 - q)(1 - c)} \right\} (u) - 1$$

where d is opportunity cost of fund (%)

q is risk of default (%)

c is administrative cost of loans (%)

u is extent of undervaluation (as earlier specified).

4. The Study Area and Methodology

The study was carried out for village money lenders in Onicha and Ohaozara local government areas (LGAs) of Imo State, Nigeria. The constituent communities are predomi-

nantly rural with agriculture as the main economic activity of the people. Most farmers in these communities obtained production credit from informal money markets dominated by private money lenders who are alleged to charge high interest rates (Ugama, 1990).

The sample consists of three money lenders and thirty six borrowers. Purposive selection was used to obtain three money lenders from the ten communities that make up the two local government areas. The criterion for selection were (i) experience in money lending and (ii) willingness to divulge needed information regarding both his lending activities and identity/location of his clients. Twelve borrowers were randomly selected from the list provided by each money lender. Information on research variables were obtained using two questionnaire; one for lenders and the other for borrowers.

5. Empirical Analysis

Credit market in the rural communities consists of a large number of borrowers and very few number of lenders. All the money lenders studied had been resident in the communities for at least thirty years and they know virtually all potential and actual borrowers within the community.

They grant loans to persons not familiar to them, only when a trusted person is used as a guarantor. Entry into the lending activity is greatly constrained by artificial barriers and stringent conditions set by the money lenders themselves. It is unlikely that any borrower would voluntarily default in repayment. This is mainly because prior to any loan grant, the borrower must mortgage a portion of his land. Since the value of such land usually exceeds loan amount, the borrower aims to repay the loan and interest fully. Moreover, the labelling of a borrower as a "bad debtor" diminishes very remarkably his prospects of obtaining loan from any money lender.

An interlinkage between the crops market and the credit market was observed. This derives largely from the fact that loans are usually secured against standing crops. Under the arrangement, a borrower receives his money loan by pledging to the lender a specified quantity of standing crop (s) at an agreed price known as the credit price. The lender receives the quantity pledged immediately after the crop is harvested and can sell it at ongoing harvest market price. The crop mostly used is rice; the fact that most of the money lenders are rice traders while most of the borrowers are rice farmers reinforces the interlinkage. Loan durations are not usually more than a year.

6. Money Lenders and Borrowers

Private money lending activity is dominated by trade merchants whose formal educational training exceeded primary school. All the three money lenders studied are polygamous with twelve as the least household size. They are all title-holders and occupy key community leadership positions. Total land holdings belonging to any one of them exceeded ten hectares. They have relatively greater access to urban institutions and invariably have sound knowledge of past, current and possibly future credit conditions in the villages of operation. Most borrowers are small farmers, with plot sizes ranging from 0.5 ha to 2.0 ha. They generally have weak socio-economic positions including lack of education. The poorer socio-economic status of borrowers predispose them to manipulation of money lenders. Thus, they have smaller bargaining strength relative to the money lender. The agricultural performance of borrowers over the years provides lenders with ready assessment of the credit worthiness of potential borrowers.

7. Loan Characteristics

All the thirty-six borrowers obtained their loans between May and October, 1989 with repayment fixed at January, 1990. Sixty-four percent of them borrowed between May and July while others (36%) borrowed between August and October.

For analytical purposes, two loan periods are defined thus: period one ranging from the median month of June (in the May - June - July array) to January (the following year - a duration of seven months); and period two ranging from the median month of September (in the August - September - October array) to January (the following year - a duration of four months). All loans granted during period one are therefore assumed to take effect from June whereas those granted during period two takes effect from September.

For both, January of the following year (i.e. 1990) remains the repayment time of all loans.

The average values of credit price for each month were obtained as follows:

Table 1
AVERAGE VALUES OF CREDIT PRICE BY MONTH OF TRANSACTION

Month	Average Credit Price P ³ (N)
May	49.27
June	48.43
July	49.0
August	50.25
September	60.33
October	53.67

The average harvest market price was obtained as N118 per local bag of paddy rice. Using the average values of credit price (P^s) and harvest market price (P^h), the periodic rate of interest is computed and shown as follows:

Table 2

VALUES OF LOAN INDICATORS FOR PERIOD ONE

Variable	May	June	July	Average Value
Number of borrowers	11	7	5	23*
Credit price (P^s) in N	49.27	48.43	49.0	49.0
Interest rate (100r)	140	144	141	141
Duration (months)	8	7	6	7
Monthly interest (100R)	11.56	13.59	15.79	13.39

* Total value.

Table 3

VALUES OF LOAN INDICATORS FOR PERIOD TWO

Variable	August	September	October	Average Value
Number of borrowers	4	6	3	13*
Credit price (P^s) in N	50.75	60.33	53.67	55.85
Interest rate (100r)	133	96.6	120	11
Duration (months)	5	4	3	4
Monthly interest (100R)	18.43	18.26	29.71	20.52

* Total value.

The essence of dividing the loan period into two is to determine whether period specificity affect loan indicators. It is seen from the above (Tables 2 and 3) that the rate of interest on loans in period one was 141.0% for an average duration of seven months. The corresponding average monthly compound rate was 13.39%. But for period two, with average duration of four months, the rate of interest was 111.0% while the corresponding monthly compound rate was 20.52%. It could be observed that as harvest time was approached, the compound rate of interest as well as credit price became higher. However, the compound rate increased at a decreasing rate given that if credit price had remained fixed at the period one value (N49.00) the compound rate would become

24.6% instead of the 20.52% actually observed. This trend is explained by the declining demand for loans as the period came closer to harvest time. In support of this explanation there was a decrease in number of borrowers from 23 in period one to 13 in period two. On the other hand, the increase in credit price could be explained by the increasing awareness among borrowers of the harvest market price as the harvest time was increasingly reached. During the study period, this awareness was promoted by initial harvest failures caused by pests and diseases infestation on rice crops. On the basis of this, borrowers upgraded their assessment of the value of standing crops which in turn led to increase in the credit price.

A summary of values of loan indicators for the entire loan period (May - October) is shown below:

Table 4

VALUES OF LOAN INDICATORS FOR THE ENTIRE PERIOD

Variable	Average value
Number of borrowers	36*
Credit price (P^*) in N	51.44
Interest rate (100r)	130
Duration in months	5.5
Monthly compounding rate (100R)	16.3

* Total

It is shown therefore that for the entire period spanning 5 1/2 months, the observed rate of interest was 130.0% which by conventional standards is extremely high.

8. Other Loan Indicators

The average amount of money borrowed was N334.67. The default rate tended to increase with the loan amount.

Persons who borrowed between N100-N199 had the least default rates (8.01%). The next higher class of borrowers (N200-N299) exceeded this rate by a margin of 3.3%. Similarly, people borrowing between N300-N399 defaulted 17.57% of their loan amounts, exceeding the former (N200-N299) by a margin of 6.19%. People who borrowed between

N400-N499 and N500-N599 had default rates of 18.12% and 20.41% respectively. On the average, however, for all classes of borrowers the money lender faced the risk of 20.61% of loan amounts being defaulted.

The opportunity cost of funds was computed as the interest rate fixed by institutional credit agencies with whom the money lenders maintain deposits. Four commercial banks with which the money lenders maintain accounts were identified; viz, African Continental Bank (ACB) Ltd - 18.00% interest rate, United Bank for Africa (UBA) - 17.00% interest rate, Union Bank of Nigeria (UBN) Ltd. - 17.00% interest rate and First Bank of Nigeria (FBN) Ltd - 17.00% interest rate (Guardian Financial Weekly, August 6, 1990). The average rate of interest which then stands for opportunity cost of fund is 17.28%.

Administrative costs were defined to include costs associated with issuance of loans and pursuance of repayments. On the average, a lender spent 46.5 minutes to grant loan to a borrower. The same average length of time was spent in pursuing repayments. Thus, lenders spent an average of 93 minutes in issuing loans to and pursuing repayments from a borrower. Using the prevailing wage rate (N31.10 per manday - 540 minutes) in the area as the opportunity cost of lender's labour, the administrative cost per loan would be N2.68. It was observed that lenders did not regard issuance and pursuance of loans as significant component of their costs. This is understandable considering that money lenders have been resident in the villages for a very long time and have sound relevant knowledge about potential and actual borrowers. As a result, little time and money costs are involved in granting loans and receiving repayments. For our purposes, therefore, the average total administrative cost is expressed as a percentage of average total amount due for repayment. The estimated value was 0.696%.

9. Estimates of the Relative Significance of the Lender's Risk Hypothesis and the Theory of Collateral Undervaluation

Under the assumption that there is no collateral undervaluation (that is, negotiated harvest price, P^m , = harvest market price, P^h and so $u = 1$), $r = (1 + d)/(1 - q) - 1$. This represents the rate of interest that would be charged if the factors emphasized by the lender's risk hypothesis were the only relevant factors. Comparing the computed rate to the observed rate of interest, the differential represents the proportion accounted for by collateral undervaluation. Substituting our values of $q = 20.61\%$, $d = 17.28\%$ in the relevant equation $r = (1 + d)/(1 - q) - 1$ we obtain $r = 47.73\%$. This implies that if the factors expressed by the lender's risk hypothesis were the only relevant factors,

the rate of interest should be 47.73%. This value constitutes only 36.72% of the observed rate of interest (130.0%). The remaining 63.28% of the observed rate is accounted for by the theory of collateral undervaluation.

The lender's risk hypothesis as estimated above is short of the lenders' administrative costs. Substituting the value of administrative costs ($c = 0.00696$) in the equation

$$r = \left\{ \frac{(1+d)}{(1-q)(1-c)} \right\} - 1$$

the computed rate of interest would become 48.77%. The incremental amount over the rate computed earlier arises from the discounting of administrative costs as a component of the rate of interest. The computed 48.77% rate constitutes 37.52% of the observed rate; meaning that the monopoly profit accounts for 62.48% of the observed rate of interest.

10. Conclusion and Policy Implication

The paper aimed to empirically estimate the relative significance of the lender's risk hypothesis and the theory of collateral undervaluation in explaining observed rate of interest on loans granted by private village money lenders in rural communities of Eastern Nigeria.

It was found that about 62.48% of observed rate of interest was accounted for by the theory of collateral undervaluation. The remainder was due to lender's risk hypothesis. Thus, village money lenders used their stronger bargaining power to earn monopoly profits which significantly pushed interest rates up.

In order to reduce this monopoly-like strength of money lenders, institutional credit need to be channelled to farmer groups for on-lending to individual farmers. This would increase the availability of loanable funds and reduce monopoly profits and interest rates.

References

- Basu, K. 1983. "The Emergence of Isolation and Interlinkage in Rural Markets", *Oxford Economic Papers*, Vol. 35.
 Basu, K. 1984. "Implicit interest rates, usury and Isolation in backward agriculture", *Cambridge Journal of*

Economics, June.

Borroah, V. 1980. "High Interest Rates in Backward Agricultural Communities", *Cambridge Journal of Economics*, Vol. 4, No. 2.

Bottomley, A. 1963a. "The Premium for Risk As a Determinant of Interest Rates in Underdeveloped Rural Areas", *Quarterly Journal of Economics*, Vol. 79.

Bottomley, A. 1963b. "The Cost of Administering Private Loans in Underdeveloped Areas", *Oxford Economic Papers*, Vol. 15.

Bottomley, A. 1964. "The Determination of Pure Rates of Interest in Underdeveloped Areas", *Review of Economics and Statistics*, Vol. XIV.

Ghose, A.K. 1980. "The Formation of Usurious Interest Rates", *Cambridge Journal of Economics*, Vol. 4, No. 2.

Ijere, M.O. 1975. "The Lessons of State Credit Institutions in Developing Countries - The Nigerian Experience", *Agricultural Administration*, Vol. 2, No. 2.

Okorie, A. 1988. "Rural Banking in Nigeria: Lessons from Other Developing Countries", *Agricultural Administration and Extension*, 28, 147 - 159.

Okorie, A. 1990. *Rural Banking in Nigeria: Determining Appropriate Policy Variables*, African Rural Social Science Series Research Report No. 9, Winrock International Institute for Agricultural Development.

Saleem, S.T. 1987. "On the Determination of Interest Rates in Rural Credit Markets: A Case Study of Sudan", *Cambridge Journal of Economics* (2).

Ugama, O. 1990. "Interest Rate Determination in Informal Rural Credit Markets of Onicha and Ohazara LGAs of Imo State", Unpublished B. Agric (Agric. Econ) Thesis, Department of Agricultural Economics, University of Nigeria, Nsukka.

Wai, U.T. 1958. "Interest Rates outside the Organised Money Markets of Underdeveloped Countries", *IMF Staff Papers*, Vol. 6.

Abstract

The paper examines the factors responsible for high interest rates on loans granted by private village money lenders. Empirical testing of the lender's risk hypothesis and the theory of collateral undervaluation was carried out, using data obtained from money lenders and their clients in Onicha and Ohazara Local Government Areas of Imo State, Nigeria.

Monopoly profit was found to account for a far greater proportion of interest rate charged by money lenders. Though, money lenders faced default risks, administrative and opportunity costs, the theory of collateral undervaluation largely stood out as more relevant in explaining what is commonly referred to as usurious interest rates charged by money lenders.

Channelling institutional credit to farmer groups for on-lending to individual farmer-borrowers would reduce the monopoly power of money lenders and their exercise of profiteering tendencies. Also, the increased availability of loanable funds would force money lenders to push interest rates downwards.

LES PRETEURS DE VILLAGE DU NIGERIA ET LES FACTEURS QUI INFLUENT SUR LEURS TAUX D'INTERET

RESUME

Les auteurs ont analysé les facteurs responsables des taux d'intérêt excessifs que demandent les prêteurs d'argent particuliers dans les villages. Sur la base des données obtenues des prêteurs et de leurs clients dans les régions d'Onitsha et de Ohaozara de l'Etat d'Imo au Nigéria, ils ont effectué une évaluation empirique de l'hypothèse de risque des prêteurs et de la théorie de la sous-évaluation des garanties accessoires.

Ils ont observé que dans une très grande mesure c'est le profit de nature monopoliste qui détermine le taux d'intérêt fixé pour les prêts. Certes, les prêteurs doivent faire face aux risques de défaillance, aux coûts administratifs et aux coûts d'opportunité, mais, en tout cas, c'est la théorie de la sous-évaluation des garanties accessoires qui s'avère être le facteur le plus pertinent pour expliquer les taux d'intérêt normalement définis usuraire demandés par les prêteurs de village.

L'allocation des crédits institutionnels aux associations de fermier pour qu'elles les acheminent directement aux emprunteurs-fermiers limiterait le pouvoir monopoliste des prêteurs particuliers et leurs pratiques rapaces. Encore, une plus grande disponibilité de fonds pour le crédit les obligerait à réduire leur taux d'intérêt.