Rural banking in Nigeria: Empirical evidence of indicative policy variables from Anambra State

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ABSTRACT

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Ten years after the establishment of the Rural Banking Scheme (RBS) in Nigeria, there are clear indications that the problems and issues which led to the scheme are still prevalent. These include a low level of rural savings mobilization, inadequate use of banking services, and lack of credit for rural people.

The central assumptions of the scheme were that increasing the physical proximity of banks to rural people enhances rural savings mobilization and, in turn, increases the flow of funds to the rural sector. Consequently, Nigeria established a quasi-commercial bank type of rural banking system, by means of legislation requiring commercial banks to open branches in rural areas. This study questions the validity of the underlying assumptions, and sets out to investigate the appropriate mix of policy variables necessary for establishing an effective rural banking system in Nigeria and other developing countries.

Rural residents were surveyed to find out which variables are important in determining rural bank use. Discriminant analysis showed that four variables were significant in discriminating between rural bank users and non-users. These variables were household income, years of formal education, gender of respondent, and the awareness of the existence of the rural bank branch. The proximity of the bank to the respondent's residence was not a significant determining variable.

These findings have important implications for rural bank designers and implementors in Nigeria and other developing countries. They suggest that the current emphasis on the physical distance, as a critical factor in rural bank development, should be replaced by a broader and a more comprehensive strategy which would incorporate and utilize an appropriate mix of policy variables to enhance the effectiveness of the rural banks in Nigeria.

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INTRODUCTION

Ten years after the establishment of the Rural Banking Scheme (RBS) in Nigeria, there are clear indications that the problems and issues which led to the scheme are still prevalent. These include a low level of rural savings mobilization, inadequate use of banking services and the lack of credit for rural people (Ewulu, 1986; Okorie, 1986, 1988). Although many banks were established in rural areas to correct these problems, their failure to do so is indicative of flaws in the choice of policy variables for designing the scheme.

The central assumptions of the RBS were that increasing the physical proximity of banks to rural people enhances rural savings mobilization and, in turn, increases the flow of funds to the rural sector. The frequency of use of the banking services would be expected to increase as well.

This study used discriminant analysis to determine whether physical proximity of rural bank branches is an important factor in rural people's participation in the banking system. The results of this study would be very relevant to other developing countries embarking on rural banking schemes.

BANKING SYSTEM IN NIGERIA

The banking system in Nigeria dates back to the colonial period. A review of its origin shows that priority was given to urban centres in the establishment of banks. The development of the banking system in Nigeria has continued to concentrate in the urban centres, neglecting the rural areas. By April 1977, there were 18 commercial banks in Nigeria, with 470 branches. Less than 20% of these branches were located in rural areas where more than 80% of the estimated 80 million Nigerians live (Central Bank of Nigeria, 1977). These statistics demonstrated a gross under-banking of the Nigerian economy at the time, especially in the rural sector.

In recognition of the fundamental inadequacy of banking facilities in rural areas, the federal government developed the Rural Banking Scheme (RBS). The scheme was based on Okigbo's Financial Review Committee's Report which recommended that the government compel commercial banks to open branches in rural areas (Okigbo, 1976). The objectives of the scheme were to: mobilize savings from rural areas for development purposes, provide credit to small scale industries and encourage banking habits among the rural population (Central Bank of Nigeria, 1984).

The rationale behind the development of rural banks is that capital is important as an instrument of development and must be mobilized for this purpose. The Nigerian government also assumed that the process of rural

capitalization and monetization depends upon the availability of financial institutions and services in the rural areas.

APPROACHES TO RURAL BANKING

Despite the widespread popularity of traditional financial institutions in the rural sectors of Nigeria and other developing countries, it is generally accepted that formal financial institutions are critical in the development of the rural areas. Formal financial institutions monetize transactions and facilitate socio-cultural, political and technological developments. Unfortunately, they do not cover the rural sectors adequately in most developing economies. Thus, many developing countries have felt the need to increase banking facilites in rural areas through special programmes.

A variety of strategies for developing rural banking have been tried in developing countries. These include creating quasi-cooperative banks, independent rural banks, and quasi-commercial banks in the rural areas (Okorie, 1988).

Quasi-cooperatives are based on regional cooperatives; examples of this are found in China, Kenya, India, and Pakistan (Von Pischke, 1981; Yeshwanth, 1985; Haroon, 1986). In Tanzania and Zambia, state-run development banks made deliberate efforts to extend their branches to rural areas (Due, 1976). The independent rural model is exemplified by rural banks in Ghana, in which each rural bank unit is autonomous (Duncan, 1987). In the quasi-commercial model, the government compels commercial banks to extend their branches to rural communities, as a deliberate policy of promoting banking activities in rural areas. This is the approach being used in Nigeria.

THE PROBLEM

The design of rural banks is critical to their effective functioning. Appropriate policy variables therefore need to be identified initially. When there are indications of flaws in the design process, it is important to re-evaluate the underlying assumptions and make changes. The failure of rural people to use rural banking branches indicates that it is necessary to re-evaluate and redesign the Nigerian rural banking system.

SAMPLING AND DATA COLLECTION

A survey of 250 rural residents was conducted. The selection of the respondents involved a multistage sampling design. In the first state, ten local government areas (LGAs) of Anambra State were purposely selected

to ensure that the leading commercial banks, which participated actively in the RBS and those banks with Anambra state as one of the catchment states, operated in the area. At the second stage, thirty villages (three in each LGA) were randomly chosen.

At the third stage, four bank users and four non-users on the average, were randomly selected from each village. Consequently, each of the ten sampled LGAs included 13 to 14 bank users and 11 to 12 non-users. The bank users were identified at rural bank premises and interviewed later as the banks would not provide the list of their customers for confidentiality considerations. The non-users were randomly selected from the village lists of men and women provided by each village head.

Data were collected between June and November 1988, using a structured questionnaire. Pretesting was done with a sample of rural dwellers in Nsukka local government area (and excluded from the study sample) to ensure the validity and reliability of the data collection instrument.

EMPIRICAL MODEL

To distinguish between the bank users and non-users, twelve variables were chosen a priori, and used to measure the respondents' socio-economic and cultural characteristics. The variables were:

X_1 years of formal schooling
X_2 gender (sex)
X_3 awareness of the existence of the rural bank
X_4 total annual income of household head
X_5 age in years
X_6 occupation of respondent
X_7 leadership position held by respondent
X_8 household size
X_9 membership of isusu club
X_{10} membership of age grade
X_{11} membership of a cooperative society, and
X_{12} distance of residence from the rural bank in kilometres.

The binary grouping variable was the use of rural bank facilities. Thus, a linear discriminant function, conceptualized and estimated was:

$$D = b_1 Z_1 + b_2 Z_2 + \ldots + b_{12} Z_{12}$$

where D is a discriminant score; b's are weighting coefficients; and Z's are standardized forms of the discriminating variables, X's.

A PRIORI BEHAVIOURAL EXPECTATIONS OF POLICY VARIABLES

The a priori expectation is that the twelve variables would contribute significantly towards discriminating between rural bank users and non-users.

This expectation is based on some intrinsic and extrinsic relationships between rural banking and these variables, and these are outlined below.

Education. Formal education enables an individual to become aware of the existence of rural banks, understand their operational modalities, appreciate the benefits (such as interests accruable, safety of deposit, etc), and therefore a desire to use bank. Lack of education, on the other hand, makes individuals ignorant and sceptical of rural banking.

Awareness. Awareness is closely linked with education and advertisement. Awareness is a critical step in the adoption of innovation. Consequently, for any person to consider using a rural bank, the person would first be aware of the bank's physical existence as well as its functions and possible gains from using it.

Occupation. In rural and urban areas of Nigeria, people tend to associate bank use with occupation. For example, senior and intermediate staff of public and private organizations are compelled by their employers to receive their salaries through banks.

Leadership. Traditional rulers and opinion leaders are usually consulted in the process of introducing any innovation to their communities. They are therefore expected to be among the early adopters of any innovation, such as rural banking.

Age. Conservatism and risk aversion are generally associated with old age, while young people are expected to have a greater tendency towards accepting an innovation. Thus, age was expected to be a discriminant variable.

Societies. Rural banks constitute only one of the numerous channels of saving and obtaining credit for rural people. Isusu [1], age grade [2] and cooperative societies are other channels through which rural people save money (Okorie and Miller, 1976; Okorie and Obeta, 1986). Thus, membership of any of the societies would affect the members' attitude towards

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[1] Isusu, traditional credit and savings group.

[2] Age grade society is an indigenous socio-economic group for the advancement of the welfare of its members and the larger community, the age range of whose members typically is within three years, and strictly gender-based. It is a cultural phenomenon in Igboland of Nigeria, but is also found among other ethnic groups in both Nigeria and other African countries.

rural banking. While the age grade and isusu societies would tend to compete with the rural banks, the cooperative societies are more likely to complement the banks, since members of cooperative societies tend to have more information about banking and are encouraged to bank by their supervising ministry in the state.

Distance.   Distance between the rural bank and a potential bank user is considered an important discriminating factor. Potential customers are discouraged from carrying out transactions with a bank if this would involve them in travelling long distances. This is because implicit and explicit costs are involved, in terms of transportation costs, time and energy wastage.

EMPIRICAL RESULTS

Socio-economic characteristics of respondents

The majority of those surveyed were men. Two-thirds of respondents were 20–40 years old, and only 11% of them were over 50 years old. As is typical in rural areas, 64% had 6 years or less of formal schooling. Only 1% had a university education, although an additional 8% had vocational training beyond secondary education at a college of technology, education or agriculture. The occupations of the respondents were well distributed: 30% were farmers, 30% were paid workers (including teachers), 22% were artisans, and 14% were traders. Seventy-two percent of the respondents had no banking experience prior to the introduction of rural bank branches.

Discriminant analysis

Discriminant analysis was performed on the data collected from the sample rural residents. The step-wise procedure was used to select the best

TABLE 1

Estimated canonical and correlation coefficients

Variable	Canonical coefficient	Correlation coefficient
Z_1	0.75668	0.69095
Z_2	0.27015	0.29633
Z_3	0.42804	0.40467
Z_4	0.32645	0.41176
Group Centroids		
Non-users of rural banks = -0.60622		
Users of rural banks = 0.50815		

discriminating variables (see Table 1). Four variables – annual income, years of formal education, gender of respondent, and the awareness of the existence of rural bank branch – were significant at the five per cent level. Four variables – age, occupation, distance of bank branch from residence, and membership of a cooperative society – were not eliminated by the step-wise procedure, but they did not contribute significantly as discriminating variables. The final four variables – leadership position, household size, membership of an isusu club or membership in an age grade society – were dropped during the step-wise procedure because their values were too low.

Thus, the canonical discriminant function obtained is:

$$D = 0.756\ 68\ Z_1 + 0.270\ 15\ Z_2 + 0.428\ 04\ Z_3 + 0.326\ 45\ Z_4$$

where Z_1 the standardized value of years of formal schooling; Z_2 the standardized value of gender; Z_3 the standardized value of awareness of the existence of the rural bank; and Z_4 the standardized value of total annual income.

Both the canonical correlation associated with the discriminant functions and the Wilk's lambda criterion confirmed that the variables identified by the step-wise procedure were significant discriminating variables (these are shown in Tables 1 and 2 respectively). In addition, the validity of the discriminant function was confirmed by the classification results for the two groups (Table 3). The classification routine was able to identify 75.4% of

TABLE 2

Wilks lambda statistics and levels of significance (with 1 and 248 degrees of freedom)

Variable name	Wilk's lambda	Significance
Age of respondents (years)	0.998 23	0.5076
Years of formal schooling	0.870 89	0.0000 *
Occupation	0.990 11	0.1167
Leadership position	0.999 64	0.7648
Sex (gender)	0.973 46	0.0098 *
Household size	0.999 68	0.7769
Awareness of rural bank	0.951 61	0.0005 *
Total annual income	0.949 98	0.0004 *
Membership of isusu club	0.998 75	0.5773
Membership of age grade	0.999 65	0.7691
Membership of a coop society	0.988 89	0.0978
Distance of home from bank	0.995 92	0.3147

* Significant at 0.05% level.
Lambda value range: max. value = 1.0000, min. value = 0.0000.

TABLE 3

Classification result for users and non-users of rural banks

Groups	No. of cases	Predicted group membership [a]	
		Non-users	Users
Non-users	114	86 (75.4%)	28 (24.6%)
Users	136	42 (30.9%)	94 (69.1%)

[a] Percent of 'grouped' cases correctly classified = 72.00%.

non-bank users and 69.1% of bank users. Thus, on the average 72% of the respondents could be correctly classified using the discriminant function.

DISCUSSION

Indicative policy variables

From this study, the critical policy variables in the design of a rural banking scheme could be regarded as those variables which distinguish rural bank branch users from non-users. Discriminant analysis showed education as the most significant variable separating rural bank users and non-users.

Income was the second most correlated variable with the canonical discriminant function which is indicative of its overall importance in the household banking decision. Also, the income variable was found to be of very high significance in explaining the savings behaviour of rural people in Nigeria (Okorie, 1989).

Awareness of the existence of the rural bank branch was the third most significant in distinguishing between users and non-users of rural banking facilities. Awareness is closely related to education.

It is significant to note that the roles of income and education in determining savings behaviour of the rural person are complementary. To a large extent, income determines how much is to be saved, while education influences where the money is to be saved. Evidence from this study shows that while a rural illiterate would prefer to save with an isusu club, an educated rural person would prefer to save with a bank.

The prominence of the gender variable in separating users and non-users of rural bank branches is understandable within the cultural framework of Nigeria. In rural Nigeria, men are regarded as the bread winners of the household, and they consequently have the prerogative of making most economic decisions, such as whether to bank or not. Even when women

participate in such decision-making, the implementation is usually left to men.

'Irrelevant' variables

The variables that could not contribute significantly to discriminating between rural bank users and non-users could be regarded as 'irrelevant' to effective rural bank policy design. However, the degree of irrelevance and explanation for this may vary among variables. These are discussed below.

The physical bank accessibility variable, the distance of the nearest rural bank branch to the residential homes of respondents, did not contribute significantly to the discrimination between users and non-users. But, in a regression analysis, it had been found to be significant and negatively related to amount saved by the rural bank customers in the area (Okorie, 1989), which is consistent with general expectations and the rationale for the government policy. The implication of the insignificance of the physical accessibility variable is that the focus on physical distance as an important factor hindering the inculcation of banking habits among rural people, needs to be taken with some caution.

Furthermore, the result of our analysis indicates that occupation may be less directly related to bank use than was expected. Self-employed people may use the bank as much as salaried workers, depending on other factors and interactions. For example, petty traders, who need bank credit facilities, tend to go to the bank very often, at times more frequently than salaried workers.

Traditional rulers are generally regarded as opinion leaders, who are usually consulted in the process of introducing any innovation to their communities. They are therefore expected to be among the early adopters of any innovation. However, the majority of local leaders fell below the modal values of the sample for the variables of income and education, which were the most crucial factors influencing banking habits, thereby rendering the leadership variable insignificant.

Though young people may have a greater tendency to accept innovation such as rural banking, in our study age did not appear as a significant discriminating variable, because two thirds of the respondents were between the ages of 20 and 40 years, leading to a diffusion of the age effect.

CONCLUSION

The lack of access to the rural banks due to poverty, lack of education and information, or gender-based discrimination, point to the need for rethinking the underlying assumptions of the scheme as well as redesigning

it. Designing effective rural banks hinges on the identification of appropriate policy variables, as has been done in this study. Furthermore, our findings agree with those of Miracle, Miracle and Cohen (1980), that for a formal financial institution to succeed in savings mobilization and extension of credit in the rural areas, it should incorporate the features that make informal savings and loan associations attractive to rural dwellers.

These findings have important implications for rural bank designers and implementors in Nigeria and other developing countries. They suggest that the current emphasis on the physical distance as a critical factor in rural bank development is excessive, and should give way to a broader and a more comprehensive strategy, which would incorporate and utilize an appropriate mix of policy variables to enhance the effectiveness of rural banks.

The new strategy will reduce the socio-economic distance between the rural poor and banks. This will involve special training for rural branch managers and staff on rural sociology and psychology, to enable them to appreciate rural people and to serve them better. Also, the strategy must incorporate a mass education campaign on rural banking services to narrow the information gap. The education campaign would also have a special component, focusing on integrating rural women into the banking system. General policies, specifically designed to increase and redistribute income in favour of the rural poor need to be pursued concomitantly.

Other factors which tend to alienate and distance rural people of Anambra State would need to be reviewed. Rural people need to be a part of the rural bank ownership and management, while the bank staff become more friendly and honest with their rural customers. The bank staff must adopt a more flexible approach to their operations, as a means of making their services more competitive and attractive.

Pursuance of these new policy directions and implementation of the strategies outlined above would make the rural banks 'real rural' both in concept and practice. These changes would usher in a rural banking system consistent with the Nigerian government's current emphasis on rural development.

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