Analysis of Access to and Demand for Credit by Small Scale Entrepreneurs; Evidence from Oyo State, Nigeria

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Abstract
This study examines choice of credit by small-scale enterprises from credit markets in Nigeria. A well structured questionnaire was designed to obtain relevant information from 350 respondents chosen through stratified sampling techniques and for the analysis, Multinomial logit was employed. The results showed that a large number of variables determine whether respondents apply for credit from credit markets or not. Each respondent was able to choose one of the five credit institutions as his/her preferred source of credit. It is conclusive that the availability of different sources of credit has impact on demand for credit. To this end, policies to enhance the role of informal credit institutions to bring about closer linkages between formal and informal institutions should be formulated. Better linkages would enable bank to benefit from the outreach and local knowledge of informal agents, expanding financial savings mobilization and credit delivery and improving the overall efficiency and productivity of the financial system.

Keyword: demand for credit, choice of credit, credit markets, small scale, Nigeria

INTRODUCTION
The growing importance of small scale enterprises in Oyo State can be appreciated by looking at the place they occupied in the 1981 – 85 Oyo State fourth Development Plan. Industrial Development comes third in terms of financial allocation under the economic sector while it is placed eight in the list of all the eighteen sub-sectors of the economy (Albert, 1983). To achieve this objective, a lot of policies and programmes had been put in place by the Federal Government. These include among others the establishment of Nigeria Industrial Development Bank (NIDB), Small Scale Industrial Schemes (SSIS), Nigeria Bank for Commerce and Industry (NBCI), Central Bank of Nigeria Special Credit Programme (CBNSCP), National Economic Reconstruction Fund (NERFUND), Peoples’ Bank of Nigeria (PBN) Community Bank and Industrial Development Centre. Despite these, the execution of these schemes had not been able to achieve the desired results of improving the lots of these entrepreneurs (Adeleke, 2001). Some important factors operate which often give rise to certain problems that make it difficult for small scale enterprises to obtain adequate financial assistance, especially tight cash flow and inadequate resources are linked to their inadequate working capital and problems of liquidity, technical insolvency and inhibited growth (Ikhide and Yinusa, 1998). Apart from these, the effects of existing institutional problems, such as the lending terms and conditions in terms of access to credit facilities have not been addressed (ROK, 1994). Nevertheless, informal credit institutions have proved relatively successful in meeting the credit need of small scale enterprise (SSE) in some countries, their limited resources restrict the extent to which they can effectively and substantially satisfy the credit needs of entrepreneurs (Nappon and Haddlestone, 1983). The reason behind this is that as micro-enterprises grow in size, the nature of loan required become increasingly difficult for informal credit sources to satisfy, yet they still remain too small for the formal lenders who consider them as uncredit-worthy (Aryeetey, 1996). In view of inadequate capital persistence and the co-existence of formal and informal credit sources in Oyo State, it is therefore, pertinent to examine access to and demand for credit from multiple choice of credit from credit market in Oyo State, Nigeria.

Credit markets in Africa have mainly been characterized by their inability to meet the existing demand for credit in rural areas. For the informal sector, the main reason for this inability is due to the small size of the resources it controls, while for the formal sector, it is not the inadequate lending base but difficulties in loan administration like screening and monitoring high transaction costs, and the risk of default (Aryeetey, 1996). Credit markets are also characterized by information asymmetry, agency problems and poor contract enforcement mechanisms (Nissanke and Aryeetey, 1995).

Aryeetey and Udry (1997) observed that while credit from individual lender to a set of borrowers may vary in terms of what package each borrower receives, the more significant variation in the formal credit market is in terms of what packages different lenders are able to offer in the market. Both authors noted that the differences in the loan characteristics represent
different lender types. The failure of many government subsidized credit programmes to reach the targeted groups has prompted the emergence of alternative means of administering rural credit so as to reduce the access problem (Braverman and Huppi, 1991). Informal credit markets have developed in rural areas providing faster services to their clients.

In the informal financial markets, loans and deposits are seen working hand in hand and this has enabled individuals to increase their access to credit by improving their deposit performance. This allows participants to enhance their credit - worthiness through their savings and repayment record. All these lessons emphasize the fact that financial intermediaries at the small-scale level must be prepared to offer the financial services demanded by clients, if micro-finance is to succeed (Schmidt and Kropp, 1987). A wide range of micro-finance institutions (MFIs), self – help savings and credit associations popularly known as ‘grassroot banks’ have also emerged as NGOs or private sector companies to respond to this huge gap in the market. These institutions provide individuals with direct financial assistance, particularly credit and saving avenues on a regular basis (Ddumba – sentamu, 1999). Further examples of such institutions include farmers’ groups, workers’ savings and credit arrangements, commercial MFIs and commercial banks operating special micro-finance projects such as the centenary Rural Development Bank Ltd.

MATERIALS AND METHODS

The study was carried out in Nigeria and the population of small enterprises in agricultural and non-agricultural activities constitute the population of the study. A well structured questionnaire was designed to obtain relevant information from 350 respondents chosen through stratified sampling techniques. In analyzing the data, multinomial logit model was used. The multinomial logit model can also be expressed and interpreted in terms of the odds, i.e the odds of outcome m versus outcome n given x, indicated by \( \omega(x) \),

\[
\omega(x) = \frac{p(m|x)}{p(n|x)} = \frac{\exp(\beta_m x)}{\exp(\beta_n x)}
\]

Combining the exponents leads to odds equation:

\[
\omega(x) = \exp(\beta_m - \beta_n)
\]

Taking logs shows that multinomial logit model is linear in the logit:

\[
\ln(\omega(x)) = \beta_m - \beta_n
\]

The difference \( \beta_m - \beta_n \), called the contract, is the effect of x on the logit of outcome m versus outcome n, since the model is linear in the logit, it is fairly simple to compute the partial derivative:

\[
\frac{\partial \omega(x)}{\partial x} = \frac{\partial \beta_m - \partial \beta_n}{\partial x} = \beta_m - \beta_n
\]

which allows us to interpret \( \beta_m - \beta_n \) thus: for a unit change in x, the logit of outcome m versus outcome n is expected to change by \( \beta_m - \beta_n \) units, holding all other variables constant. To us, the choice of financial institution is then modeled as a function of both personal and household/dwelling characteristics as defined. This can be presented in explicit form:

\[
D_i = \alpha_0 + \alpha_1 AG_i + \alpha_2 ED_i + \alpha_3 SX_i + \alpha_4 FS_i + \alpha_5 AS_i + \alpha_6 MC_i + \alpha_7 PC_i + \alpha_8 CM_i + \alpha_9 BS_i + \mu_i
\]

Where

- \( D_i \) – Choice of credit
- \( AG_i \) – Age
- \( ED_i \) – Education
- \( SX_i \) – Gender
- \( FS_i \) – Family size
- \( AS_i \) – Value Assets
- \( MC_i \) – Membership composition
- \( PC_i \) – Period of obtaining credit
- \( CM_i \) – Contribution of credit market
- \( BS_i \) – Business situation before credit.

RESULTS AND DISCUSSION

The results of multinomial logit of respondents choice of formal or informal as a source of credit is presented in Table 1. Each respondent was able to choose one of the five credit institutions as his/her preferred source of credit. There were negative relationship between age attained by respondents and accessibility to credit from relatives/friends and bank. This implies that the more the number years of an individual the less productive such as individual in economic activities hence the lesser the ability to pay back the loan. So people will not be willing to extend credit facilities to aged entrepreneurs because of fear of default.

The membership of the enterprise ownership has a negative impact on access to bank loan and relatives/friends credit. This shows that membership of the entrepreneur were not credit-worthiness, have no total control over their business and lack of the collateral to secure credit from commercial banks and relative/friends. Plausible explanation for positive coefficient of education status might be because the more an individual attain higher educational status the more the number of his/her friend/relatives that can assist him/her in terms of financial needs without ant serious problems. Also the higher the educational status of an individual the higher the credit worthiness of such an individual from the banks (Mupuga, 2008). Value of assets has negative relationship with accessing credit facility from friends/relatives because majority of the respondents have no valuable assets that can guarantee such credit. While asset is said to be positively correlated with bank loan, this is because the more the asset of an individual with certificate of occupancy or title deeds on a particular property, the higher the propensity of such an individual to seek credit facility easily from the bank. Market contribution affects bank negatively. This implies that market
contribution of most of the small-scale enterprise was small, which invariably end up to low profit margin on the part of small-scale entrepreneurs. Whereas it is positive in multiple sources of credit probably because of personal relationship with many individual involved in the loan disbursement process.

CONCLUSION
This study showed that the availability of different sources of credit has impact on demand for credit. Also, the use of specific credit sources, either formal or informal, was justified as the only source available. This may suggest the existence of only a limited range of options to choose from. It is against this background that these recommendations were made that, considering the relative abundant financial resources of the informal credit sources, there is need for policy measures to increase access of small-scale enterprises to formal credit. This can be achieved through the establishment of credit insurance scheme protecting the financial institutions against default risks, which result in credit rationing. The formal financial institutions should also be encouraged to diversify their loan portfolios so as to be able to cater for the different financial needs to small-scale enterprises.

REFERENCES

Albert, O.A. (1983); Nasi at work in Oyo State paper presented on the occasion of swearing in ceremony of the executive on Thursday, January 6th Ibadan.


APPENDIX
Table 1: Multinomial Regression of whether Individual have access credit or do not have access

<table>
<thead>
<tr>
<th>Explanatory variable</th>
<th>Relatives/finances</th>
<th>Money Lender</th>
<th>Bank Loan</th>
<th>Multiple Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.295 (0.73)</td>
<td>0.362 (0.29)</td>
<td>-0.131</td>
<td>0.117 (0.18)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.456 (-1.84)**</td>
<td>-0.386</td>
<td>-0.638</td>
<td>0.213 (0.62)</td>
</tr>
<tr>
<td>Family size</td>
<td>0.166 (0.81)</td>
<td>0.258</td>
<td>0.109</td>
<td>0.196 (0.64)</td>
</tr>
<tr>
<td>Membership Composition</td>
<td>-1.361 (-3.17)***</td>
<td>-0.338</td>
<td>-1.108</td>
<td>0.823 (1.27)</td>
</tr>
<tr>
<td>Value of Assets</td>
<td>-0.427 (-2.09)**</td>
<td>0.539</td>
<td>0.491</td>
<td>-0.027 (-0.11)</td>
</tr>
<tr>
<td>Education</td>
<td>0.672 (2.75)**</td>
<td>0.506</td>
<td>0.565</td>
<td>-0.300 (-0.74)</td>
</tr>
<tr>
<td>Period of obtaining credit</td>
<td>-0.359 (-1.68)</td>
<td>-0.103</td>
<td>-0.413</td>
<td>-0.447 (-1.15)</td>
</tr>
<tr>
<td>Contribution of credit mkt.</td>
<td>0.194 (0.71)</td>
<td>0.171</td>
<td>-2.890</td>
<td>2.633 (7.94)***</td>
</tr>
<tr>
<td>Business situation before credit</td>
<td>0.160 (0.51)</td>
<td>-0.095</td>
<td>0.386</td>
<td>0.356 (0.80)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.852 (-0.45)</td>
<td>-6.288</td>
<td>1.525</td>
<td>-10.763 (-3.82)***</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-227.91886</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


* Significant at 10% ** Significant at 5%, *** Significant at 1%

Number of Observations 350
LR chi 2 293.16 (36)
Prob. > chi 2 0.0000
Pseudo R2 0.3914