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Determinants of Demand for Credit among Farmers in the Kwabre East District of Ghana

Francis Donkor

Lecturer, Department of Accountancy and Accounting Information Systems,
Kumasi Technical University, Kumasi, Ghana

Samuel Osei Owusu Atuahene

Lecturer, Department of Accountancy and Accounting Information Systems,
Kumasi Technical University, Kumasi, Ghana

Samuel Adarkwa

Lecturer, Department of Accountancy and Accounting Information Systems,
Kumasi Technical University, Kumasi, Ghana

Abstract:

The Agric sector provides employment to majority of Ghanaians and hence serving as a very important sector in the Ghanaian economy. However, a vital section of the people engaged in agriculture is poor. Given this, it is suggested that these farmers are given other incentives as well as credit in order to expand their activities, which may end-up bettering their welfare. Given this, this study conveniently sampled 150 farm owners in the Kwabre East District of Ghana, in order to investigate the socio-economic factors that influence the demand for credit for their farming activities. The study employed the binary log it model. The study found that farmers with ages 31-40 years and 41-50 years were more likely to demand forced it relative to those who were 18-30 years. Also female farmers were found to be more likely to demand for credit relative to their male counterparts. Further, Muslim farmers were found to be less likely to have demanded for credit relative to their Christian counterparts. Moreover, farmers who had employees, those with senior high education and those with other assets were more likely to demand for credit. Also single/widowed/divorced/separated farmers were found to be less likely to have demanded for credit. Therefore policies towards ensuring higher demand for credit among farmers should take in to account socio-economic factors such as education, age, gender, ability to employ, having additional assets, religion and marital status.

Keywords: Agriculture, demand for credit, financial inclusion, Ghana, poverty reduction

1. Introduction

Agriculture remains the most important sector in most developing countries when it comes to employment. Thus the Agric sector employs majority of the people in most of these developing nations which includes Ghana. In Ghana for example, it is estimated that 41.2% of the active working population is employed in the Agric Sector (Ghana Statistical Service [GSS], 2012). This therefore makes the Agric sector a major contributor to economic growth in most developing countries. Hence it was not surprising that in Ghana, Agric contributed 22.4% and 22% of gross domestic product (GDP) in 2013 and 2014 respectively (GSS, 2015).

Thus with unemployment and poverty being major challenges in Ghana, one of the most effective strategies that can be employed is an expansion in the Agric sector in order to absorb most of this excess labour.

However it is worth noting that, a significant number of these farmers or Agric workers are poor given that they are unable to expand their businesses. Thus to enhance the well-being of these farmers through expansion of their activities which will present several employment opportunities, one of the most suggested strategies has been easier access to loans.

Thus given the above, studies have been done mostly in the three Northern regions(Upper East, Upper West and Northern regions) of Ghana on the factors that influence the up-take of credit by farmers with no study to best of our knowledge done on the southern part of Ghana, and hence Ashanti region for that matter.

This makes it worrying given that southern Ghana and the Ashanti region for that matter is a major contributor to Agricultural produce of Ghana and hence must not be abandoned. This study therefore investigated the socio-economic factors that influence the demand for credit by owners of farms in the Kwabre East District, which is in the Ashanti region of Ghana.

2. Literature Review

Financial Inclusion as a concept is basically aimed at making funds easily available to customers and one of the most important indicators of financial inclusion has to do with access to loans. By this, small businesses would be able to expand which would lead to economic growth and employment creation. These would end up improving the welfare of people and hence ousting poverty.

On the empirical front, Manrique and Ojah(2004)found that permanent and transitory incomes, education, family size among other factors, affect households' willingness and capacity to hold loans. Guérin, Morvant-Roux, Roesch, Moisseron and Ould-Ahmed(2011)and Eleni(n.d) have conducted related studies in Morocco and Greece respectively.

On Ghana, Bendig, Giesbert and Steiner (2009), Bendig, Giesbert and Steiner (n.d) and Boakye and Amankwah (n.d)have conducted related studies but did not focus entirely on farmers. With regards to studies on the determinants of demand for loans by farmers in Ghana, it has been found thatage, source of credit, education and group membership have had positive influence on the demand for agricultural credit in Northern Ghana by Hananu, Abdul-Hanan and Zakaria (2015).Also Anang, Sipiläinen, Bäckman and Kola (2015) in Northern Ghana revealed household income, awareness of lending institution, farm capital, farm location, gender among others to be influencing access to agricultural microcredit.In addition, Akudugu (2012) found that gender, age of farmers and political affiliations among others to be the major determinants of demand for credit by farmers in the Upper East Region of Ghana.

However from all the above studies on Ghana especially those that investigated the demand for credit in the Agric sector, all of them were conducted in the three northern regions with no study conducted in the southern part of Ghana. This study therefore posits that, given that the Ashanti region is also a major contributor to Agricultural produce of Ghana, it is worth investigating the socio-economic factors that influence the demand for credit by owners of farms in the Kwabre East District, which is in the Ashanti region of Ghana.

3. Data and Methods

This paper entirely used primary data in the form of administered questionnaire by conveniently selecting 150respondents who were 18 years or above in the Kwabre East District of Ghana in the month of August 2016. The respondents of the study were farm owners who were asked whether they have ever demanded forced it in their farming activities from any financial institution, governmental or non-governmental organization. The study also solicited information on other socio-economic backgrounds of respondents.

In this study the dependent variable (demand for credit) was dichotomous (Yes (1) or No (0) responses) and hence the binary logit model was used as the empirical estimation technique. Also all the remaining independent or explanatory variables of the study were treated as dummy variables since they were all categorical. Further, all the analysis of data in this study was carried out using STATA 11.2 software.

4. Results and Discussion

4.1. Descriptive Statistics

This section tackled a description of the socio-economic backgrounds of respondents as shown in Table 1 below.

| Variable (N=150) | Percentage |
|-----------------------------------|------------|
| Demand for Credit | |
| Yes | 41.33 |
| No | 58.67 |
| Respondents Age | |
| 18-30 years | 27.33 |
| 31-40 years | 30.00 |
| 41-50 years | 26.67 |
| 51-60 years | 12.67 |
| 61years and above | 3.33 |
| Gender | |
| Male | 61.33 |
| Female | 38.67 |
| Religion | |
| Christianity | 52.00 |
| Islam | 36.00 |
| Traditional/other | 12.00 |
| Farmer's Educational Level | |
| Uneducated | 32.00 |
| Basic/Junior High School(JHS) | 40.00 |
| Senior High School (SHS) | 18.00 |
| Tertiary | 10.00 |
| Hired Workers | |
| Yes | 57.33 |
| No | 42.67 |

| Marital Status | |
|------------------------------------|-------|
| single/widowed/divorced/separated | 35.33 |
| Married | 64.67 |
| Other Assets aside the Farm | |
| Yes | 52.00 |
| No | 48.00 |

Table 1: Socio-Economic Background of Respondents
Source: Authors' Computation from Field Survey, 2016.

From Table 1 above, it can be seen that 41.33% of the sampled farmers had demanded credit for their business before whilst 58.67% said they had never demanded any credit before. Thus majority of the sampled farmers had never demanded any credit before. Also among the sampled farmers, 27.33% were between 18-30 years, 30.00% were 31-40 years, 26.67% were between 41-50 years, 12.67% were between 51-60 years and 3.33% were 61 years or older. Thus majority of the farmers were between 31-40 years of age. Further, majority of the respondents comprising 61.33% were males whilst 38.67% of them were females.

In addition, most of the sampled farmers were Christians constituting 52% followed Muslims (36%) with Traditional/other religion constituting 12.00% of respondents.

Concerning farmers level of education, it can be observed that 32.00% of them were uneducated, 40.00% of them had Basic/Junior High School(JHS) level of education, 18.00% had Senior High School (SHS) level of education with 10.00% of them having tertiary level of education. Thus farmers with Basic/Junior High School(JHS) level of education dominated the sample.

When farmers were asked whether they have temporary (casual) or permanent hired/paid workers, 57.33% of them said yes whilst 42.67% of them said no. This was asked in order to be used as proxy for farmers' ability to hire paid labourers instead of unpaid labourers mostly comprising of family members that are normally used in the case of subsistence farming.

Also majority (64.67%) of the sampled farmers were married with 35.33% of them being single/widowed/divorced/separated. Moreover, when farmers were asked whether they had other assets aside the farm and hence qualifying to be used as collateral in case their farms do not qualify, 52% of them said yes, whilst 48% of them said no.

4.2. Regression Results

This sub-section presented the probit regression results on the determinants of demand for personal loans among the sampled respondents.

| Variable | Coefficient | Standard Error | P-value |
|------------------------------------|-------------|----------------|---------|
| Respondent's Age | | | |
| 18-30 years (reference group) | | | |
| 31-40 years | 2.742382 | 1.140213 | 0.016 |
| 41-50 years | 3.60076 | 1.230668 | 0.003 |
| 51-60 years | .9215496 | 1.234081 | 0.455 |
| 61 years and above | .7048416 | 2.710484 | 0.795 |
| Gender | | | |
| Male (reference group) | | | |
| Female | 1.298299 | .6658637 | 0.051 |
| Religion | | | |
| Christianity (reference group) | | | |
| Islam | -1.677818 | .709116 | 0.018 |
| Traditional/other | .7465196 | 1.03759 | 0.472 |
| Farmer's Educational Level | | | |
| Uneducated (reference group) | | | |
| Basic/Junior High School(JHS) | -1.010192 | .8449697 | 0.232 |
| Senior High School (SHS) | 3.225372 | 1.291297 | 0.012 |
| Tertiary | 1.857579 | 1.352791 | 0.170 |
| Hired Workers | | | |
| Yes | 2.742545 | .7793362 | 0.000 |
| No (reference group) | | | |
| Marital Status | | | |
| single/widowed/divorced/separated | -1.466328 | .7676087 | 0.056 |
| Married (reference group) | | | |
| Other Assets aside the Farm | | | |
| Yes | 1.554601 | .7119458 | 0.029 |
| No (reference group) | | | |
| Constant | -4.852741 | 1.463312 | 0.001 |

Table 2: Logit Regression Estimates on Determinants of Demand for Credit among Farmers in the Kwabre East District of Ghana
Source: Authors' Computation from Field Survey, 2016. Number of obs =150; Prob > chi2 = 0.0000.

From the logit regression estimates on the determinants of demand for Credit among Farmers in the Kwabre East District of Ghana, it was revealed that farmers who were 31-40 years and 41-50 years were more likely to have demanded credit for their farming activities relative to farmers who were 18-30 years old. This is because of their positive coefficients that were both significant at 1%. Thus the younger farmers were found to be less likely to have demanded for credit. This result concurs with those of Akudugu (2012) in the Upper East Region and Hananu et al. (2015) in Northern Ghana. The reason could be that those 31-40 years and 41-50 years might have been in the farming business for long and hence realise the essence of demanding loans to expand their business.

Also female farmers were found to be more likely to demand for credit relative to their male counterparts. This is because of the positive coefficient of 1.298299 for female farmers that was significant at 10%. This is in line with the findings of Hananu et al. (2015) and Anang et al. (2015) both in Northern Ghana and Akudugu (2012). This result is refreshing given that females are more vulnerable than males and hence given that they are more likely to demand for credit, it is something positive.

Also Muslim farmers were found to be less likely to demand for credit relative to their Christian counterparts. This could be attributed to a very strong Islamic teaching which forbids the taking up of credit with interest payments.

In addition, farmers with senior high school level of education were found to be more likely to demand for credit relative to their uneducated counterparts. Thus educated farmers stand better to appreciate the essence of loans to business expansion and hence would be more willing to demand for credit. This results concurs with those of Akudugu (2012) and Hananu et al. (2015).

Also farmers who had hired paid workers were revealed to be more likely to demand for credit relative to their counterparts without hired paid workers. Thus being able to hire paid workers by farmers signifies that, the farming business is promising and hence would be more willing to demand for credit relative to those without hired paid workers.

In addition, single/widowed/divorced/separated farmers were found to be less likely to have demanded for credit relative to their married counterparts. This could be that married couples could have the support of their partners in meeting the requirements to get credit relative to their single/widowed/divorced/separated counterparts.

Last but not the least, farmers with other assets apart from the farm, were found to be more likely to have demanded for credit relative to those without. This was not surprising given that those with other assets could use, these assets as collateral to demand for credit in case their farms do not qualify.

5. Conclusion and Recommendation

It can therefore be concluded from the findings that, gender, level of education, age, marital status, religion, ownership of other assets and ability to employ paid workers, are the determinants of Demand for Credit among Farmers in the Kwabre East District of Ghana. Therefore initiatives and programmes towards ensuring better access to Agric loans should target male farmers, the younger age group (18-30years), the uneducated, single/widowed/divorced/separate and Muslim farmers, farmers without additional assets as well as those who are unable to hire paid workers.

6. Conflicts of Interest: none

7. References

- i. Anang, B.T, Sipiläinen, T., Bäckman, S. & Kola, J. (2015). Factors influencing smallholder farmers' access to agricultural microcredit in Northern Ghana. *African Journal of Agricultural Research* 10(24), 2460-2469. DOI: 10.5897/AJAR2015.9536
- ii. Akudugu, M.A. (2012). Estimation of the Determinants of Credit Demand by Farmers and Supply by Rural Banks in Ghana's Upper East Region. *Asian Journal of Agriculture and Rural Development*, 2(2), pp. 189-200.
- iii. Bendig, M., Giesbert, L. & Steiner, S. (n.d) More Than Just Credit: Household Demand for (Micro) Financial Services in Rural Ghana.
- iv. Boakye, C. & Amankwah, N.O. A. (n.d). Determinants of the demand for financial Products in Ghana.
- v. Eleni, P. (n.d). Estimating the determinants of loan demand: the case of Greek households. Department of Home Economics and Ecology, Harokopio University, 70 El. Venizelou Ave, 17671, Athens, Greece.
- vi. Ghana Statistical Service (2015). Revised 2014 Annual Gross Domestic Product. April 2015 Edition.
- vii. Ghana Statistical Service (2012). 2010 Population and Housing Census. Summary Report of Final Results, May 2012.
- viii. Hananu B., Abdul-Hanan, A., & Zakaria, H. (2015). Factors Influencing Agricultural Credit Demand in Northern Ghana. *African Journal of Agricultural Research*, 10(7), pp. 645-652, DOI:10.5897/AJAR2014.9330
- ix. Manrique, J.& Ojah, K.(2004).Credits and non-interest rate determinants of loan demand: a Spanish case study.*Applied Economics*, 36, 781-791.