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INDIVIDUAL CHARACTERISTICS OF CUSTOMERS AND THE CHOICE OF FINANCIAL INSTITUTION IN GHANA: A MULTINOMIAL PROBIT REGRESSION APPROACH

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ABSTRACT

In order to enhance financial inclusion, several financial liberalisation drives have been embarked upon in various countries which have led to the emergence of many financial institutions. This has led to several studies on how the features of financial institutions influence their selection. However, very little attention has been given to how individual features of people also influence their choice of financial institution which is equally relevant in churning out effective financial inclusion policies. This study therefore purposively sampled 1000 adults aged 18 years or above having accounts with financial institutions in the Kumasi Metropolis and the Asokore Mampong Municipality of Ghana in order to study how the individual characteristics of respondents influence the choice of financial institution. By employing the multinomial probit regression model, the study found that age, level of education, gender and employment status are the individual characteristics of respondents that influence the choice of financial institution. Thus policies towards enhancing financial inclusion must recognise the fact individual features of people such as the level of education, age, gender and employment status tend to influence the choice of financial institution in order to inform effective policy prescriptions.

Keywords: Financial Inclusion; Personal Characteristics; Choice of Financial Institution; Ghana.

INTRODUCTION

Economic growth and economic development remain top most priorities of governments all over the world. Thus countries strive to attain economic growth and hence economic development in order to ensure an improvement in the lives of their people in all facets of life. This implies that the main motive has been to combat poverty through the attainment of economic growth and hence economic development. However, in the quest to fight poverty through economic growth and development, one of the major strategies that have been adopted is financial inclusion. Thus measures have been taken to make funds easily available to all kinds of people especially the vulnerable in society.

Due to the above, various reforms have been embarked upon in many nations towards expanding financial inclusion which has in turn resulted in the emergence of several financial institutions which include commercial banks, rural banks, credit unions, mutual funds, savings and loans firms and microfinance companies among others. However, what is worth noting is that, the strengths and features of these financial institutions are not the same and hence have necessitated several studies on what features of financial institutions influence people to choose them.

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In Ghana, the story has not been different since various financial liberalization drives have led to the proliferation of financial institutions which include commercial banks, rural banks, credit unions, mutual funds, savings and loans and microfinance companies among others. All these drives or reforms have been embarked upon with one of the main motives being to enhance financial inclusion which would lead to economic growth and development and hence ousting poverty. However, there have been recent challenges with regards to the increasing collapse of some of these financial institutions in Ghana, especially the microfinance firms. These have necessitated several studies on what factors, mainly features of financial institutions influence their choice by people in Ghana. See for example Davidson (2011), Ansah (2014) and host of other studies on Ghana.

However, what is wholly missing in the literature is that, how do the features of the individuals influence their choice of financial institution. Thus this study posits that, knowing the features or backgrounds of people which influence the choice of financial institution is very important for sound policies towards proper financial inclusion drives. Therefore this study filled the gap in the literature especially on Ghana, by investigating how individual characteristics of customers influenced the choice of financial institution.

LITERATURE REVIEW

The theoretical basis of the work stems from the utility maximisation theory where individuals are expected to make rational choices by choosing the option that gives them the highest satisfaction subjected to some constraint.

On the empirical literature, Muturi and Wairegi (2015) found a significant relationship between the services offered and the choice of financial institution in Kisii county in Kenya. Aregbeyen (2011) found that the existence of technology based services and the safety of funds are the main determinants of customers choice of banks in Nigeria. Mutandwa and Kwiringirimana (2015) found that interest rates, quality of services and accessibility, influenced the choice of financial intermediary in Gicumbi District (Rwanda).

Specifically on Ghana, Abbam, Dadson and Say (2015) found that introduction to banks by relatives and friends, efficient services, being a private bank, extension of working hours, bank location and existence of automated teller machine (ATM) facility are the essential factors determining customers' choice of banks in Ghana. Abbam, Say and Carsamer (2015) found that service charges, friends and parents' recommendation, efficient services, the ease of opening an account and existence of ATM facility are the essential factors determining university students' choice of commercial banks in Ghana. Davidson (2011) found ATM availability, friendliness of the personnel and proximity to residence or work place as essential factors influencing the choice of banks by customers in the Makola community. Hinson, Osarenkhoe and Okoe (2013) found that the three most essential determinants of bank choice among university of Ghana students are staff-customer relations, convenience and financial benefits/banking services. Junior, Osei and Petershie (2013) in the Berekum Municipality found safety of deposit and occupation to be the determinants of retail banking decision among customers. Also Ansah (2014) found bank reputation, easiness of obtaining loans, interest on savings, bank security, bank longevity and low service charge on account as the determinants of Banks selection among Senior High School Teachers in the Kumasi Metropolis of Ghana.

However, with regards to the studies on Ghana, we can see that they focused much on how features of financial institutions influence their selection but ignored how the features of the individuals influence their choice of financial institutions. Thus this study as stated above, contends that, knowing the features or backgrounds of people which influence the choice of financial institutions is very important for sound policies towards proper financial inclusion drives. This paper therefore investigated how individual characteristics of customers influenced the choice of financial Institution in Ghana.

Data and Methods

This study used primary data in the form of administered questionnaires by purposively selecting 1000 adults (18 years or above) having accounts with financial institutions in the Kumasi Metropolis and the Asokore Mampong Municipality of Ghana from early-January to mid-March, 2015. Respondents were asked which financial institution they save with. Also responses on the socio-economic backgrounds of respondents were gathered.

The financial institutions (dependent variable) were grouped in to five namely: Microfinance, Savings and Loans, Rural Banks, Credit Unions/ Mutual funds and Commercial Banks which were coded as 1, 2 3, 4 and 5 respectively. In this study, the base category with regards to the financial institutions was Microfinance. Also all the dependent variables were treated as dummy variables since they were categorical.

Since the financial institutions (dependent variable) were grouped in to five unranked choices, this paper adopted the Multinomial Probit (MNP) model in order to investigate how individual characteristics of customers influenced the choice of financial Institution in Ghana. We chose the MNP since it relaxes the independence restriction assumption of the Multinomial logit model as found in Greene (2012).

Thus as shown in Greene (2012) without altering the symbols or notations in Greene (2012), the structural equations of the MNP are as below:

$U_{ij} = X'_{ij}\beta + \varepsilon_{ij}, j = 1,.., J, [\varepsilon_{i1}, \varepsilon_{i2},..,\varepsilon_{ij}] \sim N[0,\sum]$ (1)

Where Uij is the expected utility of individual i for selecting financial institution j, the independent variable is represented by X, and its coefficient being β with the error term represented by ε. The above equation however can have several independent variables.

Therefore selecting option q by an individual or a person gives a term in the log-likelihood as:

$\text{Prob}\ [\text{option}_{iq}] = \text{Prob}\ [U_{iq} > U_{ij}, j = 1,...,J, j \neq q]$ (2)

Hence the likelihood of choosing financial institution q over j by individual i will be

$\text{Prob}\ [\text{option}_{iq}] = \text{Prob}\ [\varepsilon_{i1} - \varepsilon_{iq} < (x_{iq} - x_{i1})\ '\beta,..,\varepsilon_{iJ} - \varepsilon_{iq} < (x_{iq} - x_{iJ})'\beta]$ (3)

Therefore a person would choose a particular financial institution if it gives the highest expected utility.

RESULTS AND DISCUSSION

Table 1: Descriptive Statistics of Respondents Choice of Financial Institution

Financial Institution	Frequency	Percentage
Microfinance	89	8.90
Rural Bank	190	19.00
Savings and Loans	240	24.00
Mutual Fund/Credit Union	155	15.50
Commercial Bank	326	32.60
Total	1000	100.00

Source: Authors Computation from Field Survey, 2015

From Table 1 above, it can be observed that majority (32.60%) of the respondents had accounts with commercial banks, followed by savings and loans (24.00%), rural banks (19.00%), mutual fund/credit union (15.50%) and microfinance (8.90%) in descending order.

In Table 2, the Univariate analysis using the Pearson chi square showed that there were statistically significant relationship between the choice of financial institution on one hand and the age of respondents, gender, educational level and employments status of respondents individually on another hand. Thus there were significant differences within the gender, educational level and employment status of respondents and the choice of financial institution.

It can further be seen that majority of the respondents aged 18-30 years and 31-40 years had personal accounts with commercial banks. Also majority of those aged 41-50 years had accounts with savings and loans companies. Further majority of males and females as well as Christians and Muslims were found to have accounts with commercial banks. However, respondents with Traditional or other religious backgrounds had accounts with savings and loans. In addition, majority of the uneducated respondents had accounts with mutual funds or credit union. Moreover, how other remaining variables were distributed with regards to the choice of financial institution can be seen in Table 2 below. However given that the univariate analysis just looked a variable at a time and its relationship with the choice of financial institution without controlling for other variables, the study went further to use a multivariate analysis in the form of the Multinomial Probit regression Model as seen in Table 3.

Table 2: Univariate Analysis of Socio-Economic Factors and Choice of Financial Institution using Pearson Chi Square

Variable	Microfinance (%)	Rural Bank (%)	Savings and Loans (%)	Mutual Fund/Credit Union (%)	Commercial Bank (%)	Chi-square test
Age						56.5487***
18-30 years	6.20	18.60	23.14	23.55	28.51	
31-40 years	9.44	19.61	20.10	10.90	39.95	
41-50 years	10.86	20.22	29.59	16.85	22.47	
51-60 years	4.41	14.71	29.41	8.82	42.65	
61 years and above	30.00	0.00	20.00	20.00	30.00	
Gender						11.5649**
Male	11.17	20.10	25.56	16.13	27.05	
Female	7.37	18.26	22.95	15.08	36.35	
Religion						12.8354
Christianity	7.34	18.80	24.52	16.59	32.75	
Islam	12.89	19.86	21.25	13.24	32.75	
Traditional/other	6.25	15.63	37.50	12.50	28.13	
Employment Status						58.5783***
Employed	10.05	21.31	24.96	9.28	34.40	
Unemployed	6.71	14.58	22.16	27.41	29.15	
Educational Level						196.5418***
Uneducated	16.67	6.67	30.00	33.33	13.33	
Basic/Junior High School(JHS)	7.96	24.91	28.37	28.37	10.38	
Senior High School (SHS)	3.86	19.94	26.69	16.08	33.44	
Tertiary	13.24	14.59	17.84	3.51	50.81	

Source: Authors computation from Field survey, 2015. Notes: ***P-value<.01, **P-value<.05, *P-value<.1

Table 3: Regression Results on Individual Characteristics of Customers and the Choice of Financial Institution in Ghana with Microfinance as the Base Category

	Rural Bank	Savings and Loans	Mutual Fund/Credit Union	Commercial Bank
Independent Variable	Coefficient	Coefficient	Coefficient	Coefficient
Age				
18-30 years (Reference Group)				
31-40 years	-.0554801	-.1248583	-.3500328	.0365163
41-50 years	-.015275	.1745919	-.1498921	-.4299656*
51-60 years	.108618	.5136413	-.3597644	.5741605
61 years and above	-11.01186	-.8598306	-1.063093	-.6414134
Gender				
Male (Reference Group)				
Female	.1728356	.1761475	.2707925	.4617614***
Religion				
Christianity	-.0675051	-.4258287	.2478672	-.3374168
Islam	-.2840889	-.7989708	-.1234126	-.6067294
Traditional/other (Reference Group)				
Employment Status				
Employed	.0315405	-.1220068	-.8706173***	-.2466332
Unemployed (Reference Group)				
Educational Level				
Uneducated (Reference Group)				
Basic/Junior High School(JHS)	1.000145*	.1898216	.178156	.1079428
Senior High School (SHS)	1.254543**	.5984074	.2041563	1.35418***
Tertiary	.3524438	-.3899094	-1.286627***	1.050691***
Constant	-.2210352	1.099606	1.048307	.3628197

Source: Authors Computation from Field Survey, 2015. Number of obs = 1000, Prob > chi2 = 0.0000. Notes: 1 ***P-value<.01, **P-value<.05, *P-value<.1.

From the results, it can be observed that respondents with basic and senior high school levels of education were more likely to opt for rural banks relative to microfinance. Further, it can be seen that the employed were less likely to opt for mutual funds or credit unions as compared to microfinance. Thus respondents who were employed were more likely to choose microfinance. This is quite surprising since mutual funds/credit unions are normally set up by workers of an organization and hence the employed would have been more likely to opt for mutual funds/credit unions. However, this could be attributed to at times the irresistible offers been made to people by microfinance firms.

Further, respondents with tertiary education were found to be less likely to choose mutual funds or credit unions as compared to microfinance. The implication is that those with tertiary education were more likely to choose microfinance relative to mutual funds or credit unions which could be attributed to the juicy offers made by these microfinance firms.

In addition, respondents who were between 41-50 years were found to be less likely to have chosen a commercial bank relative to microfinance. Thus they were more likely to have chosen microfinance relative to commercial banks.

Moreover, female respondents were found to be more likely to choose commercial banks relative to microfinance. Thus female respondents preferred commercial banks to microfinance.

Last but not the least, respondents with senior high school and tertiary education were revealed to be more likely to choose commercial banks relative to microfinance.

CONCLUSION

From the findings it can be concluded that the level of education, age, gender and employment status are the individual characteristics of respondents that influence the choice of financial institution. Thus policies towards enhancing financial inclusion must take in to consideration of the fact individual features of people such as the level of education, age, gender and employment status tend to influence the choice of financial institution in order to inform effective policy prescriptions.

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