UNIVERSITY OF GHANA

DETERMINANTS OF FINANCIAL INCLUSION IN GHANA

BY

ISAAC ANSAFUL
(10638131)

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JUNE, 2019
DECLARATION

I hereby declare that, except for the references of other researchers’ work, which I have duly acknowledged, this study is as the result of my own original research carried out in the Finance Department under the supervision of DR. Saint Kuttu.

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ISAAC ANSAFUL                DATE

(10638131)
CERTIFICATION

I hereby certify that the preparation and presentation of this long essay was supervised in accordance with the guidelines on supervision of research work laid down by the University of Ghana, Legon.

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DR. SAINT KUTTU  DATE
(SUPERVISOR)
ABSTRACT

In spite of plethora of evidence endorsing the significance of financial sector development which includes capital markets and the banking sector in the less advanced countries, usage of financial services is skewed towards the rich individuals and those who are already better off, neglecting the poor and those who are in the remote areas. Using the Ghana Living Standard Survey Round Six (6) data, focused on four main research objectives. Employing the probit model, the study revealed that religious affiliation, educational level, age, marital status, sex and hours worked significantly influence the likelihood of owning bank account in Ghana. The study revealed that majority of the respondents that were excluded from the banking sector were as a result of poverty or financial difficulties and less than 2 percent are involuntarily excluded from formal banking services.

The findings again showed that majority of the respondents applied for loans for business, followed by consumption, education and agricultural activities. Lastly, majority of the respondents were refused loans because they were unable to provide collateral security, followed by inability to get a guarantor, low salary and inappropriate purpose of loans. The researcher suggests that policy architects should draft or model strategies that will ensure competition in the banking sector. Also, roads and communication infrastructure should be developed in order for banks to penetrate the rural areas. Banks should also strengthen e-banking or encourage strategic partnership with telecommunication networks to help minimize the distance barrier.
DEDICATION

I dedicate this work to God Almighty, my family, most especially my elder sister, Rebecca Yaaya Aduakwa and my late father, Mr. Emmanuel Kwesi Ansaful, for their immense sustenance, prayers, and inspiration throughout my study period. Be blessed.
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I am most grateful to the Lord Almighty for blessing me with life, strength, wisdom, knowledge, and sustenance to finish this programme in praise. My massive gratitude also goes to my supervisor, DR. Saint Kuttu, who in spite of his busy schedules took pain to vet this research work, offered constructive suggestions and also gave the work an intelligent support. This study would not have been successful without his kind support. I would also like to appreciate and thank my lecturers at UGBS especially seminar coordinators for their suggestions during seminar periods.

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Finally, my appreciation goes to my course mates especially “my solid study team”, friends and everyone who played various roles during my studies. I say “God richly bless you all”.

TO GOD BE THE GLORY
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LIST OF ABBREVIATIONS

ADB          Agriculture Development Bank
BOG          Bank of Ghana
FI           Financial Inclusion
GDP          Gross Domestic Product
GCB          Ghana Commercial Bank
GIB          Ghana Investment Bank
GLSS 6       Ghana Living Standards Survey Round Six
GSS          Ghana Statistical Service
ISSER        Institute of Statistical Social Economic Research
MFI          Microfinance Institutions
TPB          Theory of Planned Behavior
TRA          Theory of Reasoned Action
POS          Point of Sales
SSA          Sub-Saharan Africa
SSB          Social Security Bank
VAT          Value Added Tax
CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Several studies have acknowledged the contribution of financial sector development towards economic progress of countries (eg. Kaburu, 2012; Khan et.al, 2006; Amaral & Quintin, 2006). In spite of plethora of evidence endorsing the importance of financial sector development which consist capital markets and the banking sector in the less advanced countries, usage of financial services is skewed towards the rich individuals and those who are already better off, neglecting the poor and those who in the remote areas (see Classens, 2004; Singh & Tandon, 2012; Bold, 2011; Martinez & Mckay, 2011). Over 2.5 billion were not included in the banking sector (Kenya Bankers Association, 2012). Mpuga (2004) reported that most of the financial institutions in Africa can only be found in the cities. According to Akpandjar et.al (2013), the highly concentration of financial institutions in urban areas depicts why majority of people are excluded from banking in Ghana.

Bawumia et.al (2008) also reported that most people are excluded from the formal banking sector in Ghana. More than 35% of banks in Ghana largely have their branches in Greater-Accra Region although the region’s population was not more than 13% of population in Ghana (ISSER, 2008). According to Dercon et.al (2014, p.3), financial inclusion (FI) “can enhance household ability to gather resources and increase their ability to generate more income as well as enhancing their ability to deal with risk”. Financial inclusion refers to individuals, households that can access formal financial products. According to United Nation (2006, p.14), inclusive financial system is
ensuring that all bankable individuals and firms get access to financial services such as credit and savings”. Utilization of financial services consolidates activities like insurance, pensions and security market, deposits accounts and many more. The term “financial services” is very wide as it combines activities of insurance and banking sector.

FI has increasingly gained attention among researchers, academia and other stakeholders (see Chikalipah, 2017; Ravalion, 2014; World Bank, 2014). The increasingly gained attention demonstrates a better comprehension on the importance of FI to economic progress a country. Access to formal financial services contributes in eradicating severe poverty, supporting inclusive and sustainable development and boosting shared prosperity (World Bank, 2014). There is enough literature that demonstrates that the poor gains a lot from banking activities such as savings, insurance and payments. Without FI, people would need to rely upon their little savings (e.g World Bank, 2014; Dermiguc-Kunt et.al, 2014; Nimal, 2007). Firms would need to rely upon their little profits to grow their business (Nimal, 2007). Most studies have explored the contribution of FI to economic development (Dermiguc-Kunt et.al, 2014; Ravalion, 2014). There are likewise some studies that have clarified how FI and absence of access to finance can result in poverty (Barnejee & Newman, 1993).

Despite all the gains that people, organizations and countries obtain from financial inclusion, many individuals are still unbanked, particularly Sub-Saharan Africa (World Bank, 2014). Dermiguc-Kunt et.al (2014) revealed that proportion of bank accounts people own internationally in 2011 rose by 700 million in 2014. Likewise, the proportion without bank accounts reduced to 2 billion grown-ups.
Mahmood and Mahmood (2011) likewise asserted that more than 80 percent of grown-ups in Africa do not own account with banks. Dermiguc-Kunt et.al (2014) reported that only 29% of grown-ups in SSA own an account with banks. While the greater part of these individuals may not intentionally own a bank account, larger part of them are excluded as a result of travel distance, cost and complex documentation processes (Dermiguc-Kunt et.al 2014). Again, Dermiguc-Kunt et.al (2004) reported that only few companies (34%) in less advanced countries get access to loan facilities from banks.

In Ghana, the contribution of financial inclusion cannot be disregarded. Statistics from Ghana Statistical Service (2016) revealed that Ghana’s GDP was increased by 3.89% in 2015. The highest growth rate of 5.8% was recorded by the service sector, agriculture sector was second with a growth rate of 2.4% and the industrial sector recorded the third growth rate (1.2%). In terms of service sector, the contribution from insurance and banking accounted 22.9% (Bank of Ghana, 2015).

Despite the benefits provided by financial inclusion to individuals and the nation at large, many Ghanaians lack the accessibility to financial products. For some time now, Ghana government has introduced several financial policies that aims at getting more unbanked to the banking sector. For example, government took away the 17.5% valued Added Tax on financial services so as to make access to banking more affordable. Based on the proportion of Ghanaians that do not have access to formal banking, it is important to conduct a study that will enable us to unravel the reasons why most Ghanaians are still not included in formal banking as well as the factors that determine financial inclusion.
1.1 Problem Statement

Because of the ongoing crisis in the banking sector across the globe, a lot of nations have started prioritizing stability via regulations, also trying to offset the needs of such policy with inclusive growth advancement, particularly in underprivileged nations (Aryeetey and Kanbur, 2008; Gockel and Akoena, 2002; Mensah, 1997). Ghana has also introduced a lot of financial reforms that aims at enhancing access of small enterprises and low-salary families to financial services (Aryeteey and Kanbur, 2008). Whiles FI has essential advantage to the economic progress of a country, if policymakers are not meticulous, in their journey to advance FI, they may likewise build the rate of bank defaults, which will affect the banking sector in general. Reaching out financial services without due perseverance may have serious adverse results on the financial soundness of the country.

While there has been some advancement in bringing a lot of people into the formal financial sector; majority are still not included (Aryeteey and Kanbur, 2008; Beck and Cull, 2015). Just around 40% of people in Ghana own accounts with banks, depicting that greater part of the population are unbanked. Dermiguc-Kunt et.al (2014) revealed that nearly 30% of bank accounts in developing countries are inactive. They also reported that over 6 million accounts were opened within four years in South Africa and about five hundred were dormant. Opening new account may not necessarily result in regular usage. A lot of studies have examined the factors that drives FI in Ghana and beyond (Chikalipah, 2016; Wale & Makina, 2017; Akpandjar et.al, 2013). Wale and Makina (2017) revealed that sex, income and educational level are major determinant of bank account ownership in 18 SSA countries. Also, studies conducted by Akpandjar et.al (2013) revealed that number of people in a household, sex, age, marital status, income and occupation are the main drivers of household participation in the banking sector. Unlike, Wale and Makina (2017)
who further unraveled why individuals fail to participate in the financial sector, Akpandjar et.al (2013) did not consider that in Ghana. And to the best of my knowledge, limited study on such issue have been conducted in Ghana. However, the researcher believes that for any financial inclusion policy to be effective in Ghana, it is necessary for a study to be conducted in Ghana to find out why Ghanaians are still not included banking services.

A large portion of these policies that look to attract those who do not have account with banks to the financial sector have fizzled in light of the fact that policymakers neglected to discover from the unbanked their purposes behind not using it. For us to achieve or promote financial inclusion in Ghana, we have to structure a package that will suit the unbanked. With their concerns in mind, policy makers can implement policies that will suit their desire. Also, some studies have shown that religious affiliation and disability has significant influence on financial inclusion (see Joy et.al, 1991). However, limited studies have been done in Ghana to ascertain how religious affiliation and disability influence FI in Ghana. Hence, the decision to include these variables in the study.

1.2 Research objectives

The sole purpose of this research work is to comprehend or investigate the factors that influence the probability of owning bank account in Ghana. The study will specifically look at:

I. To investigate the main drivers of FI in Ghana.
II. To investigate why Ghanaians are reluctant to possess bank account in Ghana.
III. To investigate why Ghanaians seek for credit from financial institutions.
IV. To investigate why Ghanaians are declined credit from banks.
1.3 Research questions

I. What are the main drivers of FI in Ghana?
II. Why are Ghanaians reluctant to possess bank account in Ghana?
III. Why do most Ghanaians seek for credit from banks in Ghana?
IV. What are the reasons why Ghanaians are declined credit from financial institutions?

1.4 Significance of the study

Promoting access to banking activities demands finding solution to market failure problems such as moral hazard and asymmetry information that alarms people from disparaging in the financial sector. It likewise accompanies presenting services that will match the expectation of clients. Policies can only meet the expectations of clients only when authorities are oblivious of their conduct or their worries on such activity. Frequently, banks make reforms for clients without having knowledge on how they will react to it. This study is noteworthy on the grounds that it will uncover why a lot of Ghanaians are still excluded from banking. This will aid stakeholders to design policies that will draw most of the people that are still excluded to banking sector. It will likewise assist financial institutions to have knowledge on difficulties that their clients face in doing business with them.

Another significance from the study is that, it will expose the elements that impacts financial inclusion in Ghana. Likewise, the financial sector is burdened with credit default and this has even crumpled some domestic banks in Ghana. Because of information asymmetry, financial institutions are unfit to recognize what their clients truly utilize the credit allowed for. Most clients lie to the bank that the credit will be put into their business and when they are approved. Be that as it may, a large portion of them redirect the money into an alternate endeavor. This study will
assist the bank with getting a thought on how people spend the credit or loan facility and will assist them with making judicious decision on credit approvals. Capacity to pay back credit relies upon how the credit was spent. Lastly, stakeholders can use this study to enhance their financial inclusion strategies.

1.5 Organization of the study

The presentation of the study is done in five segments. The background of the study, objectives, questions, significance, organization and the limitation of the study is captured in the first chapter. The second chapter also reviews scholarly works of other researchers. The chapter two is discussed in four sections, namely definition of key concepts, theoretical, empirical and conceptual framework. The theoretical review explains the theory underpinning the study. The empirical aspect also presents findings of earlier researchers. Chapter three discusses the research design, data source, econometric models and variables introduced in the study. Chapter four discusses results and findings from the study. The summary, conclusions and recommendations are found in the final chapter.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section reviews literature on previous studies that have been done on factors that influence FI in Ghana and beyond. The section covers information such as banking overview in Ghana, definition of key concepts, theoretical, empirical and conceptual underpinnings of the study.

2.1 Banking overview in Ghana

The historical accounts of banking in Ghana could be followed to 1953, when Alfred and the government established Bank of Gold Coast at the time. After some time, the bank was separated into two, specifically, Ghana Commercial Bank (GCB) and Bank of Ghana (BoG). It was the primary motivation of BoG to fill in as a bank of issue and this was to be changed over into central bank. Additionally, GCB was to fill in as a record for state-owned enterprises. A ton of banks appeared somewhere in the range of 1957 and 1965. For example, the Social Security Bank (SSB), Merchant Bank, Agriculture Development Bank (ADB) and Ghana Investment Bank (GIB) all started task inside this era for savings advancement.

In 1989, banks such as Meridian (BIAO) Trust Bank, Eco bank, Allied and CAL bank were cleared to work after the passage of the financial law. Financial Institutions Law 1993 (P.N.D.C.L. 328) also authorized Non-banking financial organizations to operate. Non-banking organizations looking to work as finance houses, discount organizations, entomb alia, building social orders, or
renting and contract buy organizations were granted permission by the arrangement made by the law.

The Ghanaian banking sector keeps on encountering security in its activity making it one of the major sectors that enhances financial development. The banking sector can consist of central bank and various different banks (commercial banks, rural banks, microfinance). Already, banking sector was overwhelmed by government banks and showed couple of rivalry. Within a decade, some government banks have been privatized. There were 33 enrolled banks in Ghana, consisting 16 local banks and 17 foreign banks as of December, 2016. Altogether, there were 1342 bank offices in Ghana. The financial sector structure of Ghana is demonstrated in Figure 2.1.
Figure 2.1: Structure of Ghanaian Financial services industry

Bank of Ghana

Deposit Taking institutions

Non-Deposit institutions

Securities and Exchange Commission

National Insurance Commission

National Pensions Regulatory Authority

Ghana Stock Exchange

Insurance companies

Insurance Brokers

Re-insurance

SSNIT

Occupational pension

Private Pension scheme

Univers al Bank

Finance Houses

Rural/comm

Leasing Compan

Savings &Loans

Micro Finance

Micro Finance

Forex Beureau

Credit Beureau

Source: Bank of Ghana
2.2 Definition of Key Concepts

2.2.1 Financial Inclusion

Defining financial inclusion is not very simple and straightforward (Morgan and Pontines, 2014). Financial inclusion has been defined in several ways (Khan, 2011; Hanning & Jansen, 2010; Demirguc-Kunt & Klapper, 2012). Per Hanning and Jansen (2010), financial inclusion seeks to bring the “unbanked” into the banking sector so as to give them the chance to access banking activities such as insurance, payments, saving, and transfers to the credit. Khan (2011, p.3) also defined FI as “the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost”. FI is a major problem in the less developed countries, particularly in Africa (Chikalipah, 2017). Beck and Cull (2015) reported that most of the financial institutions in Africa are less inclusive relative to those in advanced countries. The G20 reported in 2010 that financial inclusion promotes economic development (Zins & Weill, 2016) and this is mostly true for the vulnerable, including children and women. When people are giving financial services accessibility, their primary needs like shelter, health and education are able to be achieved (Bruhn & Love, 2014). World Bank (2012) reported that financial inclusion helps to reduce poverty and enhance economic development. Studies have illustrated that individuals that are included in banking are able to get finance for their invest in their investments, which results in alleviation of poverty and economic development (Bruhn & Love, 2014; Beck, Dermirguc-Kunt, 2012).
2.2.2 Dimensions of Financial Inclusion

Several nations have strengthened their decision to implement policies that will ensure that anybody who want to be financially included are not omitted or left out from the financial sector because of the benefits that countries gain from financial inclusion (Shehzad & Haan, 2009; Arya, 2014; Sharma, 2016; Dixit, Radhika & Ghosh, 2013). Financial inclusion is more of a multidimensional issue (Alliance for Financial Inclusion, 2012). They believe institutions and people can be classified into two, that is whether the organization or individual is excluded or not. World Bank (2012) provides a detailed description of FI indicators. There are three scopes to FI - access, quality and usage (Arya, 2014). According to Arya (2014, p.15), access focuses on “the capability of banks to give financial services and products that are related to the regulatory market and technology environment”. To examine access to financial services, one needs to figure out the difficulties that these banks face in rendering their services. Indicators such as bank branches penetration, point of sales (POS) device demonstrate access to it.

Quality refers to the possibility that these banks can meet their clients’ or customers’ expectation with their products or services. That is to say, it measures the degree to which these financial institutions are able to satisfy or match the expectation of their clients to demands of their services. Indicators such convenience, transparency, consumer protection, product-fit, and safety demonstrate quality of product. Usage characterizes how clients utilize banking activities such as number of electronic payments made, savings and number of transactions per account. In order for one to utilize banking activities, you need to be given access to it. Be that as it may, it is imperative to take note of the fact that granting one access to banking activities does not really imply that everybody will use it. Not every person who does not get involved in banking activities ought to be named barred. The G 20 FI indicators are demonstrated in Table 2.2.2 below.
<table>
<thead>
<tr>
<th>Category</th>
<th>Indicators</th>
<th>Dimension</th>
<th>Aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adult formally Banked</td>
<td>% of adults with an account at a formal financial institution</td>
<td>Usage</td>
<td>Individuals</td>
</tr>
<tr>
<td></td>
<td>Number of deposit accounts per 1000 adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Adult with credit at regulated institutions</td>
<td>% of adults with at least one loan outstanding from a regulated financial institution</td>
<td>Usage</td>
<td>Individual</td>
</tr>
<tr>
<td></td>
<td>Number of borrowers per 1000 adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mobile transaction use</td>
<td>% of adults that use their mobile device to make a payment</td>
<td>Usage</td>
<td>Individuals</td>
</tr>
<tr>
<td>4. Points of Service</td>
<td>Number of branches as per 100,000 adults</td>
<td>Access</td>
<td>Physical point of service</td>
</tr>
<tr>
<td></td>
<td>Number of ATMs per 1000 adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of POS terminals as per 100,000 inhabitants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. E-money Accounts</td>
<td>Number of e-money accounts for mobile payment</td>
<td>Access</td>
<td>Mobile points of service</td>
</tr>
<tr>
<td>6. Financial Knowledge</td>
<td>Financial Knowledge score</td>
<td>Quality</td>
<td>Financial Literacy and Capabilities</td>
</tr>
<tr>
<td>7. Financial Behavior</td>
<td>Sources of emergency funding</td>
<td>Quality</td>
<td>Financial Literacy and Capabilities</td>
</tr>
<tr>
<td>8. Cost of Usage</td>
<td>Average cost to open a basic current account</td>
<td>Quality</td>
<td>Barriers to use</td>
</tr>
<tr>
<td></td>
<td>Average cost to maintain a bank account current account</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average cost of credit transfer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Global Partnership for financial inclusion
2.3. Theoretical Framework

2.3.1 The Theory of Planned Behavior

Several researchers have admitted that it is difficult to explain human behavior (Ajzen, 1998; Sherman and Fazio, 1983). Concepts denoting behavioral dispositions such as personality trait and social attitude have all contributed in the effort to envisage and elucidate human behavior (Ajzen, 1998). Several researchers have argued that personality traits and attitudes have an influence on explicit behaviors only incidentally via affecting some of the factors that are related to the behavior in question, in this context, account ownership (see Ajzen and Fishbein, 1980). There are a lot of theories that aims at predicting human behavior. The notable among is the Azjen’s theory of planned behavior (TPB) which was developed by Azjen (1991). TPB have been found to be crucial in predicting a varied range of human behavior (see Saidin & Isa, 2013; Madden et.al. 1992). It is therefore important to assume that the TPB will enable us to investigate the main drivers of FI in Ghana.

TPB is an extension of the theory of reasoned action by incorporating perceived behavioral control as a predictor of ones intention to engage in a behavior. Perceived behavioral control differentiate between the two theories. The two theories hold the assumption that individuals are rational beings and as such utilize the information available to them when making decision. The theory of planned behavior is depicted in Figure 2.3.1 below.
The Theory of Planned Behavior examines the intention of an individual to engage in a behavior (Ajzen, 1991). Ajzen (1991) identified three factors that underline one’s intent to get involved in a behavior. The first of these factors is the attitude of the person and opinion towards that behavior (Ajzen, 1991). Individual factors like a person’s ability, gender and age all contribute in shaping a person’s attitude towards the behavior (Giluk & Postlethwaite, 2015). The second determinant of behavioral intentions according to the TPB (Ajzen, 1991) is the subjective norm (opinions of others about a behavior). Thus, the views and opinions of other people influence the behavior of a person. Per TPB, perceived behavior control is the third determinant of behavioral intention. The perceived

Source: Adopted from Ajzen (1991) and Mathieson (1991)
behavioral control deals with the ones perception of the difficulty or ease with which the behavior can be executed or performed. It increases when the individual is more confident that he has the necessary skills to perform the behavior and decreases when the individual perceives that it is more difficult for the behavior to be performed (Ajzen, 1991).

Prediction of behavior and intentions has been possible by applying TPB. (see Mathieson, 1991; Young et.al, 1993; Madden et.al, 1992). After extensive review, the researcher is yet to see a study found to have used TPB to explain the elements that predict FI in Ghana. Hence, the decision to adopt the theory for this study.

2.3 Empirical Review

2.3.1 Factors that predict FI

Numerous or various studies have examined FI determination at country, household and individual levels (Akpandjar et.al, 2013; Chikalipah, 2017; Wale & Makina, 2017). Akpandjar et.al (2013) explored the factors that drives partaking or utilization of financial products in urban and rural areas in Ghana. Employing tobit analysis, the findings revealed that marital status, occupation, sex, household size, age, income, and remittances significantly influence household decision to participate in the financial market. The findings revealed that exist a direct significant relationship between household head sex, household size, and demand for financial services. They found that male headed households are expected to demand more financial services against female headed households. The findings demonstrated that financial literacy has a bearing on financial services request in Ghana. Also, the findings suggested that individuals that dwell in the rural parts are
more likely to obtain financial assistance outside the formal banks than individuals that dwells in urban areas.

Chikalipah (2017) also explored the factors that determine FI in Sub-Saharan Africa. The study used World Bank data from 20 Sub-Saharan Africa countries. The findings revealed that financial inclusion in SSA is largely influenced or challenged by illiteracy. Total adults that owned formal bank account was used as a proxy for FI in the study. The study also controlled for variables such as literacy, GDP growth, infrastructure index, Gross National Income and Population density.

Employing the Ordinary Least Square (OLS) method, the study revealed that literacy, GDP growth and GNI per capita can positively influence FI in SSA.

Also, Wale and Makina (2017) also examined the effect of factors including income, sex, age, and education on the likelihood of owning bank account in 18 countries in SSA. The study employed the probit model. Two dependent variables were used in the study, namely ownership (where one indicates individual owns a bank account and zero otherwise) and use of accounts to save money (which was also a dummy with one indicating that within the past one year a person saved money in account and zero otherwise). The independent variables accounted for in the study were gender, age, education and income. A descriptive analysis from the study revealed that account ownership was higher in males relative to females. They also revealed that ownership and use of account for saving were largely amongst the mid-aged class. Employing the econometrics analysis, the findings demonstrated that males are more likely to have higher bank account ownership relative to females and was significant at 5%. Age was positively significantly related to the likelihood of owning a bank account and those with primary education are less likely to own a bank account.
The results also demonstrated that at a particular age level, the chance of account ownership will decrease and it is depicted by the coefficient of age square.

Basing on World Bank Global Findex (2012) data, Allen et.al (2016) reported that the likelihood of possessing bank account is influenced by income, education, age, marital status and employment. They found out that the likelihood of owning a bank account is higher for the highly educated, the richer and those employed. Funcagova and Weill (2015) also revealed that the more educated, the richer and older men are more prospect to be included financially in China.

Lastly, Zins and Weill (2016) also explored the drivers of FI in Africa using data on 37 African countries. The findings from the study revealed that sex, age, education and income can significantly influence FI in Africa. The likelihood of owning formal account, formal savings, and credit is higher in men relative females. Also, age has a positive impact on owning bank account, savings and credit. After extensive review of the available literature, to the best of the researcher’s knowledge, a study that has incorporated disability status of individuals, individual’s religious affiliation, and the hours of work is yet to be seen in Ghana. Hence, the decision of the researcher to include these variables as a determinant of financial inclusion in Ghana. The researcher will therefore intend to fill a gap and add to knowledge by building on earlier studies by Akpandjar, Quartey, Abor, 2013 to incorporate disability, religion, and hours of work.

2.3.2 Reasons for not owning a bank account

Several studies have also examined why people do not own account with banks in spite of all efforts to bring them to the banking sector (see Financial Inclusion Insight Africa, 2015; Dermiguc-kunt et.al, 2014). For instance, Financial Inclusion Insight (FII) Africa (2015) examined the
demand for financial services, identified challenges in assessing financial services and measured adoption and usage. In the case of Ghana, 3,002 Ghanaians aged 15 years and above were involved in the survey. They found that 34% had bank account, 20% had registered for mobile money and 48% owned a financial account. Out of the 34 percent that owned bank account, 7% of them were inactive. The study further revealed that exactly 43% of the participants that did not have account with a bank (n =2059) reported that they did not have enough money to save, 27% had an alternative mode of saving; 15% reported that bank charges were too high and 10% did not know the process or procedure to open bank account and 5% gave other reasons.

The study further examined why individual do not access loans from banks. Exactly 47% reported they have other source other than bank that they can get loan, 15% reported that the bank charges a higher interest rate, 12% preferred borrowing from relatives, 19% reported that the needed amount of was not big to compel them to appear at the premises of the bank, and 7% also claimed higher bank charges. Similarly, Dermiguc-kunt et.al (2014) also embarked on a study to figure investigate why people are not interested in possessing a bank account. The study revealed that 30 percent of the respondents do not own bank account because of insufficient money, 25 percent also stated that their relatives own bank account, hence their decision not to own one. Also, 20 percent reported that owning account is very expensive, additional 20% cited distance to the bank’s office as major reason for not owning bank account and 2 and 3 percent cited religion and loss of trust in the banks as a major reason for not owning a bank account. Additionally, the study found that factors such as age, education, gender and location also influenced financial inclusion greatly. For instance, the study revealed that 36 percent of women in emergent countries own bank account relative to 46 percent of their male counterparts. Exactly 22 and 27 percent of women and men also owned bank account respectively in SSA. Also, they study found that individuals that do not
have any form of education were less likely to have account with a bank against to those who have completed tertiary education. From the above review, it is clear that people do not own bank account because of insufficient funds or money, followed by having other alternatives and bank charges too high.

### 2.4 Conceptual Framework

The conceptual framework was embraced from Akpandjar et.al (2013) and Wale and Makina (2017). This framework briefly describes the factors that determine FI in Ghana. Bank account ownership was used as proxy for FI. Based on previous studies, the researcher argues that factors such as education, occupation and household characteristics can determine financial inclusion. Figure 2.4 demonstrate conceptual framework for the study.

Figure 2.4: Conceptual Framework for determinants of financial inclusion
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction
This section discusses all the systematic steps and the procedures that the researcher followed to ensure that the objectives of the study are accomplished. The source of data, research design, empirical model specification and description of variables were all information captured in this section.

3.1 Source of Data
The study used a secondary data, specifically, GLSS 6 data acquired from Ghana Statistical Service for the analysis. The database covers information on Ghanaian households in all the 10 regions. Information on household features, Health, Education, Migration, conditions of housing, Employment, agriculture, Tourism, income as well as financial services accessibility were all obtained from the data.

3.2 Population and Sample of the study
The study’s population refers to households in Ghana. Employing simple random sampling technique, 1,200 enumeration areas were considered in the survey with a sample of 18,000 households. Omirin (2008) defines sampling technique as the techniques employ in selecting the sample size from a population. Households successfully enumerated were about 16,772. Over-all, 72,372 individuals were covered made up of 51.56% females and 48.44% males.
3.3 Research Design

This study adopted quantitative research design, specifically, a survey study. Bryman (2012, p.5), quantitative research as “a research strategy that emphasizes quantification in the collection and analysis of data.” This form of research design tries to find answers to the questions beginning with to what extent, how many, how much (Rasinger, 2013). The quantitative research method was selected as appropriate because it enables the researcher made use of probit model to establish the relationship between the dependent and independent variables. The study employed a cross-sectional data for the analysis. The study employed both inferential and descriptive statistics.

3.4 Data Analysis

In order to investigate the determinants of financial inclusion in Ghana, the researcher employed the probit estimation model. The study adopted probit model because the dependent variable is dummy, as “1” denoting that a person has a bank account whiles “0” otherwise. The probit model assumes an S-shaped responds curve such that in each tail of the curve, the dependent variable \[ Pr(Y= 1) \], response slowly to changes in the independent variables while towards the middle of the curve, \[ i.e. \text{towards the point where } Pr(Y= 1) \text{ is closest to 0.5} \], the dependent variable responds more swiftly to changes in the independent variable. The other alternative binary regression estimation technique is logit model. However, probit model was most preferred because of its interpretation, that is, if an independent variable makes an individual less or more likely to own bank account. The probit model assumes that while we only observe the values of 0 and 1 for the variable Y, there is latent, unobserved continuous variable Y* that determines the value of Y. That is from Nagler (1994) the general probit regression equation

\[
P_y (y=1|x_i)
\]  

(1)
where \( y \) represents bank account ownership and \( x \) is a vector of explanatory variables that capture socioeconomic factors that influence individual’s decision to own a bank account.

The estimated bank account ownership model is specified as:

\[
P_r(y=1|x_i) = F(\alpha + \beta_i X_i + \phi_i Z_i + \theta_i H_i + e_i)
\]

where \( X_i, Z_i, H_i \) denotes a vector of variables such as gender, age, marital status, religion, disability etc.; \( \alpha \) is a constant term and \( \beta, \phi \) and \( \theta \) are parameters of different groups of variables that capture the extent of influence of these variables on bank account ownership; \( F \) is a function using values strictly between 0 and 1; whiles \( e \) indicate the error term having mean zero and variance. The model is specified as:

\[
Pr(Y = 1|x_i) = F(\alpha + b_1 \cdot Male_i + b_2 \cdot Age_i + b_3 \cdot Age^2_i + b_4 \cdot Married_i + b_5 \cdot Religion_i + b_6 \cdot EDUC_i + b_7 \cdot Hrswk_i + b_8 \cdot HHSIZE_i + b_9 \cdot HHSIZEq_i + b_{10} \cdot Disability_i + e_i)
\]

Where \( Y \) represent financial inclusion variable and \( i \) also indicate given individual. The other variables in the model represent the independent variables and are explained in the next section. The \( e \) also represents the error term. The error term accounts for all variables that can potentially influence financial inclusion but were not included in the study. The analysis was conducted with the help of STATA (Version 14). First data was extracted from the GLSS database.
3.5 Description of variables

3.5.1 Dependent Variables

There are several indicators that can be used as proxy for FI. However, following Wale and Makina (2017), this study used bank account ownership as proxy for FI, as coded as “1” if the person has account with a bank and “0” if the person does not have an account with a bank.

3.5.2 Independent variable

Household and demographic characteristics such as age, sex, number of people in a household and marital status were included as explanatory variables. Sex is binary variable coded as “0” if individual is female and “1” if individual is male. Marital status is categorical coded with “0” if individual is single or widowed and “1” if individual is married or cohabitating. Household size is a continuous variable that represent the number of people in a household. Age is also a continuous variable representing individuals’ age. Age squared was also introduced in the model to cater for a possible non-linear relationship between age and FI.

The highest educational qualification is also categorical variable reflecting educational status of individual. The variable is coded 0 if individual has no qualification, 1 if individual has not completed tertiary education and 2 if individual has completed tertiary. Religious affiliation is also categorical coded with 0 if individual is a Muslim and 1 if individual is non-Muslim. Hours of Work is a continuous variable indicating the number of hours individuals work in a week. Disability is also a dummy variable coded as one if individual is disabled and 0 otherwise. Table 3.5.2 below briefly describes the variables used in the study.
### Table 3.4: Description of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OUTCOME VARIABLE</strong></td>
<td></td>
</tr>
<tr>
<td>Account ownership</td>
<td>=1 if the person possesses bank account</td>
</tr>
<tr>
<td></td>
<td>=0 if otherwise</td>
</tr>
<tr>
<td><strong>COVARIATES</strong></td>
<td></td>
</tr>
<tr>
<td>1. Household size</td>
<td>Number of household members</td>
</tr>
<tr>
<td>2. Square of household size</td>
<td>“Log of household size squared”</td>
</tr>
<tr>
<td>3. Disability</td>
<td>=1 if a person has a serious disability</td>
</tr>
<tr>
<td></td>
<td>=0 if otherwise</td>
</tr>
<tr>
<td>4. Educational qualification</td>
<td>= “1 if individual has completed tertiary”</td>
</tr>
<tr>
<td></td>
<td>= “0 if otherwise”</td>
</tr>
<tr>
<td>5. Marital Status</td>
<td>= “1 if individual Married”</td>
</tr>
<tr>
<td></td>
<td>= “0 if otherwise”</td>
</tr>
<tr>
<td>6. “Age”</td>
<td>Age of the person</td>
</tr>
<tr>
<td>7. “Age squared”</td>
<td>Age squared of person</td>
</tr>
<tr>
<td>8. “Sex”</td>
<td>1 = Male; 0 = Female</td>
</tr>
<tr>
<td>9. “Hours worked”</td>
<td>Number of hours worked</td>
</tr>
<tr>
<td>10. Religion</td>
<td>1 = Non-Muslims; 0 = Muslims</td>
</tr>
</tbody>
</table>
CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This study investigates the determinants of financial inclusion in Ghana using GLSS (6) data obtained from Ghana Statistical Service. This section presents the findings in three folds. Firstly, the study presents information on the demographic characteristics including age, sex and others. The second aspect provides analysis on account ownership based on gender, age group, education and religious affiliation. The last aspect also provides results on the determinants of bank account ownership in Ghana.

4.1 Profile of respondents

This section presents analysis on the profile of respondents in the survey. This enables the researcher to have a fair idea on the respondents in the study. Table 4.1 presents the profile of respondents considered in the study. The findings revealed that 51.56% of the respondents were females. Approximately, 13.24% of the respondents were between the ages of 0-4 years, 33.68% were between the ages of 5-17 years, 37.18% were aged 18 to 45 years, 9.49% had the age from 46 to 60 years whiles 60 years and above constituted 6.41%. Exactly 41.1% of the respondents were married, 42.10% single and 5.82% were divorced. Furthermore, 26.82% of the respondents were Muslims and 73.18% were non-Muslims. In terms of highest educational qualification, only 4.16 percent had tertiary qualification and 0.78% had no qualification.
Table 4.1: Profile of respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35,055</td>
<td>48.44</td>
</tr>
<tr>
<td>Female</td>
<td>37,317</td>
<td>51.56</td>
</tr>
<tr>
<td><strong>Age-group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-4 years</td>
<td>9,583</td>
<td>13.24</td>
</tr>
<tr>
<td>5-17 years</td>
<td>24,372</td>
<td>33.68</td>
</tr>
<tr>
<td>18-45 years</td>
<td>26,908</td>
<td>37.18</td>
</tr>
<tr>
<td>46-60 years</td>
<td>6,870</td>
<td>9.49</td>
</tr>
<tr>
<td>60+</td>
<td>4,639</td>
<td>6.41</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>20,171</td>
<td>41.10</td>
</tr>
<tr>
<td>Consensual Union</td>
<td>3,064</td>
<td>6.24</td>
</tr>
<tr>
<td>Separated</td>
<td>918</td>
<td>1.87</td>
</tr>
<tr>
<td>Divorced</td>
<td>1,410</td>
<td>2.87</td>
</tr>
<tr>
<td>Widowed</td>
<td>2,855</td>
<td>5.82</td>
</tr>
<tr>
<td>Never Married</td>
<td>20,660</td>
<td>42.10</td>
</tr>
<tr>
<td><strong>Religious Affiliation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslims</td>
<td>19,396</td>
<td>26.82</td>
</tr>
<tr>
<td>Non-Muslims</td>
<td>52,914</td>
<td>73.18</td>
</tr>
<tr>
<td><strong>Educational Qualification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>396</td>
<td>0.78</td>
</tr>
<tr>
<td>Non-Tertiary</td>
<td>48,060</td>
<td>95.06</td>
</tr>
<tr>
<td>Tertiary</td>
<td>2,102</td>
<td>4.16</td>
</tr>
</tbody>
</table>

Source: GLSS (6)
4.2 Bank Account Ownership and Loan Application analysis based on demographic factors

This section presents results on bank account ownership and loan application based on gender, age group, marital status, religion an educational qualification. Comparison based on gender revealed that more females own bank account than men, they apply for loan more than men and they are mostly refused more than males (Figure 4.2). The result shows that 5,643 males own bank account whiles 6,098 females own account. With respect to loan application, 1,187 females applied for loans.

**Figure 4.2.1: Bank Account Ownership and Loan Application analysis based on gender**

Figure 4.2.2 depicts bank account ownership according to age group. The result shows that 39.09% of bank accounts are owned by children below 15 years, 19.12% are between the ages of 15-24 years. This implies more than 50% of the accounts were owned by children and young adults. This is also in tandem with Wale and Makina (2017) who also found out that young ones dominate when it comes to bank account ownership in Sub-Saharan Africa. The findings clearly show that the young and children are not excluded from the banking sector.
Figure 4.2.2: Bank Account Ownership based on Age group

![Account ownership chart](chart.png)

Figure 4.2.3 also revealed that Non-Muslims own bank account more than Muslims. Also, majority of the respondents that had ever attended school own bank account more than those who have never attended school. The findings clearly show that education has greater influence on financial inclusion in Ghana.
4.3 Reasons why individuals do not own bank account

The second objective of the study is to investigate why people fail to have account with banks in Ghana. In the GLSS data, the respondents were asked whether they have bank account or not, as well as the main reason for not owning a bank account. Out of the 61,323 respondents, only 19.15% owned bank account. Majority (80.85%) of the respondents did not own a bank account. This finding depicts why this study is really important. Per the findings, a lot of Ghanaians are unbanked.

Out of the 49,582 individuals that did not have accounts with banks, 45.62% reported that they do not have account with bank because they do not have enough money, 29.33% are also excluded because they do not have regular income, 18.37% reported they were not interested, 2.41% were unaware of bank account, 0.79% also reported the process for owning bank account was cumbersome, 1.54% reported that the distance to the financial institutions was too far and 1.95%
also gave different reasons for not having account with bank. Figure 4.3 presents a graph that demonstrates why individuals do not own bank account in Ghana. From figure 4.3, it can clearly be seen that most people are not included in the banking sector as a result of poverty. This is because almost 75% of the respondents were excluded due to financial reasons (not enough money and irregular income). The findings from the study implies that only few people were involuntarily excluded from the banking sector. The finding is consistent with Wale and Makina (2017) who also revealed that majority of Sub-Saharan African Countries do not own bank account because of insufficient funds or money. Similarly, Dermiguc-kunt et.al (2014) also revealed through their study that most people do not own bank account because of insufficient funds in Africa.

**Figure 4.3: Why individuals do not own bank account**
4.4 Reasons for Loan Application
This study also sought to unravel intentions or reasons for applying for loans in Ghana. This provides answers to research objective three. The study revealed that only 2,198 respondents had applied for loans from financial institutions. Out of this number, 90.49% of the loans were approved or granted. This implies that a lot of people who applies for loan gets approval in Ghana. The study revealed that people apply for loans for various reasons. This study classified the purpose of loan application into seven main expenditure, namely, consumption, social events, housing and assets, education, agriculture farm inputs and business activities. Out of the 1,990 respondents that responded to this question, 20.65% applied for loan for consumption, 1.06% applied for social events expenditure and 11.81% applied to cater for housing and assets expenditure. Also, 13.97% applied to cater for educational expenditure, 14.22% and 36.83% applied to cater for agriculture farm inputs and business expenditure respectively. Exactly 1.46% of the respondent applied for other reasons. The findings imply that about half of the respondents are applying for the loan to invest in a venture that will help them to reap profits. Figure 4.3 depicts the purpose for applying loans.
4.5 Why individuals are refused loan

As stated earlier in the previous section, only few people were refused loan. This study went further to unravel the rationale behind the refusal of loans. This finding also corresponds to research objective four. Out of the 207 respondents that were refused loan, 28.78% reported they were unable to provide collateral security, 13.17% were denied because their salary was too low and 7.32% were denied because the amount applied were too high. Exactly 3.90% were denied because of previous debt problems and 6.83% were rejected on the basis of inappropriate purpose of loan. Figure 4.5 depicts why banks fail to grant loans to individuals.
4.6 Factors influencing financial inclusion in Ghana

This aspect presents results upon the ultimate aim of this study. The main aim of this study is to investigate the socio-economic factors that determine financial inclusion in Ghana. In this study, ownership of bank account was used as a representative for FI. Individual is said to be financially included if the person owns bank account, otherwise, the person is financially excluded.

Probit model was used to evaluate the effect of independent variables on bank account ownership in Ghana. The model contained 10 independent variables (sex, age, age square, marital status, religion, education, hours worked in a week, household size, household size square, and disability). The model is a good model because it was statistically significant (Prob>Chi2 =0.0000) depicting the model is able to explain variations in bank account ownership. As presented in Table 4.6, only six of the independent variables (age, sex, marital status, religion, education, and hours worked in a week) were statistically significant in determining financial inclusion in Ghana. There are two
possible ways of reporting the probit regression; that is, either to report the coefficient (1) or the
marginal effect (2). Several studies have shown that reporting the change in Pr(Y=1) or the
marginal effect is superior means of reporting the relationship between the dependent and the
independent variable, hence the decision to report the marginal effects instead of the coefficient.

The result shows that age has a coefficient of .039393; and additional increase in the age of
individual will result in an increased probability of owning bank account by 0.015, holding all
other variables constant at 1%. A plausible reason to this is that when one grows up, he is more
likely to get a job that will earn him income. The likelihood that the person will save is high when
he earns income and a person can only save when he owns account with a financial institution,

hence the positive effect of age on financial inclusion. This finding is consistent with that of Wale
and Makina (2017) who found that the aged are more likely to own a bank account. Also, the study
is consistent with that of Zins and Weill (2016), Fungacova and Weill (2015), Allen et al. (2016)
who all found that the coefficient of age has positive effect on the likelihood of having an account
with a bank. For instance, Fungacova and Weill (2015) reported that a unit increase in age increases
the probability of owning account by 1.7% in China.

The negative coefficient of age square depicts that after a certain age, the probability of owning
bank account declines. This finding is not surprising because as one grows old, you lose strength,

hence the likelihood of getting a job that will fetch one income decreases and this leads to reduction
in the likelihood of owning a bank account. The negative coefficient of age square is in tandem
with Life Cycle Hypothesis (LCH) of savings and consumption propounded by Modigliani and
Brumberg (1954). The LCH can be extended to people’s intention to own a bank account in the
formal sector even though it focuses on the amount people save.
With respect to sex, the result shows a coefficient of 0.007172 and the likelihood of having an account with a bank is 0.19\% more likely in males relative to females, holding all other variables constant. This finding was not surprising because men control most of the income generating activities in Ghana and are more likely to earn income than women. The result is also not surprising because males have comparative advantages in the labour market compared to their women counterpart in Ghana. This finding is consistent with that of Shihadeh (2018), Zins and Weill (2016) and Fungacova and Weill (2015) who all found that the likelihood of having an account with a bank is higher in males relative to females. For instance, Fungacova and Weill (2015) found out that probability of owning bank account in China is 4.5\% less likely for women. Wale and Makina (2017) also reported that females are 4.7\% less likely to own a bank account in Sub Saharan Africa.

With respect to educational qualification, tertiary had a coefficient of .0913989 and also the likelihood of having an account with a bank was 3.3\% higher for those who have tertiary education relative to those who do not have tertiary education and was significant at 5\%. This shows that educated people are more likely to be financially included. The findings did not come as a surprise because educated people are more likely to land on a good job with better remuneration, which will lead to higher chances of having an account and higher chances of savings. Furthermore, it is much easier for educated person to deal with documents, read and appreciate the financial rules and regulations. Another plausible reason for this finding is that most of the educated people work in the formal sector which demands that the opening of a bank account through which their monthly salary will be paid into. The result is also in tandem with Shihadeh (2018) and Zins and Weill (2016) who all found that the educated ones are more likely to own a bank account than those who are not educated.
With respect to religious affiliation, the result shows a coefficient of .1734886 and the likelihood of having an account with a bank is 4.9% higher in non-Muslims relative to Muslims and was significant at 1%. This does not come as a surprise since most Muslims that are religiously inclined are usually excluded from conventional banking because they believe it is a sin (haram) to take interest on savings, hence majority are excluded from taking part in formal banking. Additionally, the coefficient of hours of work in a week depicts that additional increase in the hours of work in a week increases the probability of owning a bank account by 0.129%. This finding also does not come as a surprise because when the number of hours the person works in a week increases, it enables the person to earn more income. Hence, the person is able to save with a bank.

Marginal effect of the independent variables was also estimated for prioritization of policy programs. As depicted in Table 4.5 (2), marital status, religion and education have the highest marginal effects on bank account ownership whereas the marginal effects of age and hours of work were small. This implies that to close FI gap, more and resilient efforts should be made to target the Muslims, those with low level of education and the married ones.
Table 4.6: Determinants of Financial inclusion

<table>
<thead>
<tr>
<th>Variables</th>
<th>Co-efficient (1)</th>
<th>Marginal effect (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Male</td>
<td>.007172***</td>
<td>.0019855***</td>
</tr>
<tr>
<td></td>
<td>(.0212232)</td>
<td>(.0058806)</td>
</tr>
<tr>
<td>2. Age (years)</td>
<td>.039393 ***</td>
<td>.014998 ***</td>
</tr>
<tr>
<td></td>
<td>(.0030035)</td>
<td>(.0008533)</td>
</tr>
<tr>
<td>3. Age square</td>
<td>-.0000403</td>
<td>-.0000152</td>
</tr>
<tr>
<td></td>
<td>(.0000331)</td>
<td>(9.39e-06)</td>
</tr>
<tr>
<td>4. Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>-.0392195 **</td>
<td>-.0154943 **</td>
</tr>
<tr>
<td></td>
<td>(.0495435)</td>
<td>(.0078415)</td>
</tr>
<tr>
<td>5. Non-Muslims</td>
<td>.1734886 ***</td>
<td>.0487251 ***</td>
</tr>
<tr>
<td></td>
<td>(.0492585)</td>
<td>(.0077734)</td>
</tr>
<tr>
<td>6. Educational qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td>.0913989 **</td>
<td>.0337977 **</td>
</tr>
<tr>
<td></td>
<td>(.2203792)</td>
<td>(.030096)</td>
</tr>
<tr>
<td>7. Hours worked</td>
<td>.0046921 ***</td>
<td>.0012947 ***</td>
</tr>
<tr>
<td></td>
<td>(.000844)</td>
<td>(.0001327)</td>
</tr>
<tr>
<td>8. Household size</td>
<td>-.0090916</td>
<td>-.0014371</td>
</tr>
<tr>
<td></td>
<td>(.0169843)</td>
<td>(.0026846)</td>
</tr>
<tr>
<td>9. Household size squared</td>
<td>.000414</td>
<td>.0000654</td>
</tr>
<tr>
<td></td>
<td>(.0010617)</td>
<td>(.0001678)</td>
</tr>
</tbody>
</table>

*** p<0.001 ** p<0.05 * p<0.1
Table 4.6: continues

<table>
<thead>
<tr>
<th>Variables</th>
<th>Co-efficient</th>
<th>Marginal effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Disability</td>
<td>-.046412</td>
<td>-.0073363</td>
</tr>
<tr>
<td></td>
<td>(.1376234)</td>
<td>(.0217538)</td>
</tr>
<tr>
<td>11. Constant</td>
<td>-2.284686 ***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.2526439)</td>
<td></td>
</tr>
<tr>
<td>Number of Observations</td>
<td>18,482</td>
<td>18,482</td>
</tr>
<tr>
<td>LR chi2 (10)</td>
<td>150.54</td>
<td></td>
</tr>
<tr>
<td>Prob&gt;chi2</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.0085</td>
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</table>

*** p<0.001 ** p<0.05 * P<0.1
CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.0 Introduction
In this study, the researcher investigated the determinants of financial inclusion in Ghana using the Ghana Living Standard Survey Round Six database. This section presents summary, policy recommendations and conclusion of the study.

5.1 Summary
The study used the GLSS (6) data to investigate the determinants of FI in Ghana. The probit model was selected as the appropriate econometric model for predicting financial inclusion in Ghana. The study focused on four main research objectives. The first objective investigated the determinants of financial inclusion in Ghana. The second and third objectives also focused on why Ghanaians are reluctant to have an account with a bank and why Ghanaians apply for credit from banks respectively. The last objective also focused on why banks fail to approve loans applied by the customers.

Employing the probit model, the study found that religious affiliation, educational level, age, marital status, sex and hours worked significantly influence the likelihood of owning bank account in Ghana. The study revealed that the chances of having account with a bank in Ghana is higher in males relative to females. It further revealed that age increases the chances of having a bank account up to a certain point and it begins to decrease again. The probability of having an account with a bank was low for those who are married relative to those who are single. Those with tertiary
education are more likely to own bank account than those who do not have tertiary education. Additional increase in the hours of work an individual does in a week also increases the probability that the person will own a bank account.

The second objective of the study was to examine why people do not want to have account with bank in Ghana. The study revealed that less than 2 percent are involuntarily excluded from formal banking sector. Majority of the respondents that were excluded from the banking sector were as a result of poverty or financial issues. The third objective also investigated why people seek for financial assistance from banks. The study found that respondents sought for financial assistance for business purposes, consumption, education and agricultural activities. The last objective also looked at why financial institutions fail to approve loans of their clients. Majority of the respondents are refused loans because they are unable to provide collateral, followed by inability to get a guarantor, low salary and inappropriate purpose of loans.

5.2 Policy Recommendations and Conclusion

With respect to reasons for not owning bank account, the major reasons for exclusion were lack or insufficient money. The “lack of money” is a serious problem for policy makers as it demands transforming the economy to boost production and improve the income levels of citizens. The cumbersome process and distance too far may be due to lack of lack of competition and under-developed institutional and physical infrastructure. Hence, the researcher recommends that policy makers should design policies that will ensure intense competition in the banking sector. Also, roads and communication infrastructure should be developed in order for banks to penetrate the
rural areas. Banks should also strengthen e-banking or engage in strategic partnership with the telecommunication networks to help minimize the distance barrier.

Lastly, Ghanaian authorities can promote the ownership of formal bank account by dismantling challenges associated with gender, education and income which are all issues pertaining to long term.
References


ISSER (2008), The State of the Ghanaian Economy in 2007, ISSER, University of Ghana, Legon


