AN INVESTIGATION INTO FINANCING URBAN SHELTER DEVELOPMENT TO LOW AND MODERATE-INCOME EARNERS IN GHANA: THE CASE OF ACCRA

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A research report submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, in fulfilment of the requirements of Master of Science in Building.

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Declaration

I, Felicia Addobea Sao, hereby declare that this research report is my own original work and it has never been previously produced or submitted at this University or any other institution. It is being submitted in partial fulfilment of the degree of Master of Science in Building to the University of the Witwatersrand, Johannesburg. All sources of information have been duly acknowledged.

5 February 2013

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Felicia Addobea Sao   Date

Abstract

The housing situation in Ghana been described by various bodies as a sector in crisis. There is an increase in demand, especially in the affordable housing bracket where high and middle income earners mainly engage in self finance or take advantage of the few mortgage facilities available. This is beyond the reach of the majority of the population who are outside these income brackets. Housing finance plays an important role in urban shelter development and it is believed that expansion of credit programmes will have beneficial effects on low and moderate-income (LMI) groups. It is also key to poverty alleviation, livelihood and diversification. In Ghana, low and moderate-income groups source their loans mostly from informal lenders or from their personal savings, thus access to formal loans remains low. There is a need to further examine LMI groups' access to loans and investigate their preferences and perceptions regarding loans that their access can be improved and how their needs through credit can be more effectively met. Determining the problems and the loan needs of LMI groups are important considerations in designing housing finance systems that are appropriate for them.

The study is conducted in a typical case study area like Accra where accessibility of LMI groups is examined, with the primary objective of exploring the use of and access to housing finance. This research attempts to explore and understand the perceptions of LMI earners toward housing finance, and to collect information in proposing an appropriate credit system for them.

Two types of respondents were interviewed for the research; a sample of 75 respondents were drawn to reflect the typical characteristics of the LMI population and the contribution of formal and informal financial institutions to provide affordable housing finance packages to LMI earners. The research focused on how LMI groups perceived the housing finance products, their preferences, their reasons for borrowing, and their problems in accessing credit.

A mixed methods research design representing field surveys in the form of questionnaires (quantitative) and theoretical in the form of multiple case studies for methods of analysis (qualitative), approach is adopted to draw characteristic conclusions from the chosen LMI sample population.

Access to housing finance by LMI groups is limited to available credit services in the research area, thus LMI groups' choices and preferences were not well served which led to borrowing from informal lenders. Credit restrictions such as commodity specific credit programmes, credit that requires collateral, lengthy and complicated procedures restricted the LMIs from accessing formal loans for housing. It is recommended that accessibility to housing finance loans by LMIs could be

improved by providing innovative financing schemes that address problems of LMIs who lack collateral and minimise long processing of documents and other requirements. In this way LMIs may be encouraged to better utilise formal credit and decrease their reliance on informal lenders and personal savings, thus avoiding higher interest rates and thereby increasing their household incomes.

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Most importantly, I wish to thank my late mother for encouraging me to pursue my studies further as she used to say *"It is with education that the world becomes your oyster"*.

I offer my sincerest gratitude to my supervisor, Nalumino Akakandelwa, who has supported me throughout my thesis with his patience and knowledge whilst allowing me the room to work in my own way. I attribute the quality of my Master's degree to his encouragement and effort, without him this thesis would not have been completed or written. One simply could not wish for a better or friendlier supervisor.

I have been lucky to receive tremendous affection from several members in my extended family. Their support and encouragement has been instrumental in my overcoming several hurdles in life. I am particularly grateful to my younger brother, Kwabena who has shown exemplary patience while I completed my thesis. I am indeed blessed to have them in my life.

To my dearest friend, Mwangala whose support is immensely acknowledged.

Dedication

This thesis is dedicated to the memory of my fallen angel, my mother, affectionately known as 'Sister Ahima' who has been the greatest influence on my life. She fought a good fight. No words are sufficient to describe my late mother's contribution to my life. I owe every bit of my existence to her.

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Acronyms and Abbreviations

AGM	Annual General Meeting
AMA	Accra Metropolitan Assembly
AS	Advisory Services
AUHF	African Union for Housing Finance
BHC	Bank for Housing and Construction
BOG	Bank of Ghana
CHF	Co-operative Housing Foundation
CPI	Consumer Price Index
ECOWAS	Economic Community of West African States
EMA	Enabling Market Approach
FGBS	First Ghana Building Society
FINSAP	Financial Sector Adjustment Program
FINSSP	Financial Sector Strategic Plan
GAMA	Greater Accra Metropolitan Area
GHC	One US Dollar is equivalent to 9,670 Ghanaian Cedi
GOG	Government of Ghana
GPMMI	Ghana Primary Mortgage Market Initiative
GREDA	Ghana Real Estate Developers Association
GSE	Ghana Stock Exchange
GSS	Ghana Statistical Service
GUA	Ghana Union Assurance
HFC	Home Finance Company
HFIC	Housing Finance Institutional Reform Committee
IDA	International Development association
IFC	International Finance Corporation
IMF	International Monetary Fund
LMI	Low and Moderate-Income
LTV	Loan-to-Value Ratio
MBG	Merchant Bank (Ghana) Limited
NBSSI	National Board for Small-Scale Industries
NGO	Non-Governmental Organizations
NRG	Non-Resident Ghanaian

OSIs	Originating and Servicing Institutions
REIT	Real Estate Investment Trust
ROSCAs	Rotating Savings and Credit Associations
SECO	Swiss Secretariat for Economic Affairs
SHC	State Housing Corporation
SIC	State Insurance Corporations
SMEs	Small and Medium Sized Enterprises
SSNIT	Social Security and National Insurance Trust
UBA	United Bank of Africa
UN	United Nations
UNCHS	United Nations Centre for Human Settlements
U.S.	United States
USD	United States Dollar

Glossary of Terms

Stool and skin lands management - a stool is the traditional symbol of office for chiefs in Southern Ghana and shin is the equivalent symbol in the north. Hence, in terms of land tenure "stool" is the term used to refer to the chieftaincy or representative of the tribal system that owns land, in northern Ghana.

Stool, skin and family lands - lands vested in the appropriate stool, skin or family on behalf of and in trust for subjects of the stool or skin or family members.

Susu - In the Akan language Susu means "Small small" can be taken to represent the build-up of money from numerous sources to get a larger sum.

Capital: Accra

New Currency: Cedi (GHS)

Old Currency: *Cedi (GH₵)*

Time zone: *GMT +0*

International dialing code: *+233*

Driving: *Right*

Area size: *239,460 km²*

At a glance / quick facts

Common Definition: *Republic of Ghana*

Language: *English is the official language, but Ga is the main local language. Fanti, Haussa, Fanteewe, Gaadanhe, Akan, Dagbandim and Mamprussi are also spoken.*

Region: *Africa*

Latitude: *8.0000000*

Longitude: *-2.0000000*

Religion: *Christianity 50 per cent, traditional African religions 32 per cent, Islam 13 per cent*

Climate: *Hot and humid tropical climate. April to July is the rainy season, with the coastal area drier than inland.*

Ethnic Groups: *There are seven main ethnic groups, including the Akan (Ashanti and Fanti), 44 per cent, in the mid-southern part of the country. There are also Mossi-Dagomba, Ewe and Ga-Adangbe minorities, among others.*

Country snapshot: *Ghana is a well-administered country, by comparison with others in West Africa, in which power has been peacefully transferred between political parties in largely free and fair elections. Living standards are rising as the economic growth rate exceeds population growth, but a considerable disparity persists between the poor north and the better developed south.*

Currency value: *1 USD = 1.85032 GHS as at 7 May 2012*
     1 USD = 18,503.2 GH₵ as at 7 May 2012

     Warning: GH₵ Ghanaian Cedi is obsolete and no longer legal tender.

1. INTRODUCTION

"A strong economy causes an increase in the demand for housing; the increased demand for housing drives real-estate prices and rentals through the roof. And then affordable housing becomes completely inaccessible."

- *William Baldwin*

1.1 Background

Housing is one of the most important basic needs in every society. Improved housing markets also provide positive externalities, as well as direct consumption benefits. Increased housing activities for instance also stimulate other economic activities through ancillary industries such as construction materials which also then benefits professionals such as architects and civil engineers.

Population growth in developing countries and cities around the world in the last three to four decades has had serious challenges and consequences on urban housing. In 1996, it was estimated that about 100 million people were homeless in the sense that they lived in insecure or temporary structures or in squatter settlements (UNCHS, 1996b). UN-habitat in 2003 described this problem as particularly worrying as it constituted a crucial element that affects the long-term outlook of humanity (UNCHS, 2003). Housing is increasingly becoming a scarce commodity in many cities in the developing world as this rapid population growth concentrates in cities. What is apparent about this situation is that there is a severe shortage of housing in urban centres in the developing countries. The figure for the estimated housing shortage across the world according to the internationally recommended standards, (PPD 3.5) is 428,700,000 units. However this figure is more than doubled if it is calculated using the Dutch standards (PPD 2.4); 1,088,219,000 units.

In efforts to address this problem, the United Nations Conference on Human Settlement in its Istanbul Declaration, changed its policy focus on governments' direct interventions in housing provision to that of being enablers (UNCHS, 1996a). In this conference, key components of the housing development process were identified as land, housing finance and building materials. Governments as enablers were to ensure that these components had competitive but regulated markets. The role of housing finance was emphasised as one which greatly increased the capacity of those with modest or low income to gain housing finance to build, extend or buy housing. The most remarkable commitment by member states pertaining to housing finance was the commitment to strengthen existing financial mechanisms, developing innovative financing and the recognition that local institutions involved in microfinance had the potential for housing for the poor.

Against this backdrop, it is established that access to housing finance by all income groups is important to ensuring adequate shelter for all and sustainable housing production to fill the gap

between adequate and affordable shelter (UNCHS, 2005). Housing production is capital-intensive and access to continued flows of finance is necessary to ensure both the quantity and quality of housing. Formal finance systems such as commercial mortgage finance can provide this continued flow of finance for prospective home owners. Since the 1990s this form of finance has been expanding in many countries of which new providers range from commercial banks to mortgage companies. Access to this form of finance, however, is limited to middle and high-income groups. The low and moderate-income (LMI) groups are ineligible for commercial mortgage finance because of their inability to meet the conditions of formal finance of minimum deposits and regular income streams for long-term repayments. In the absence of housing finance alternatives, the low and moderate-income households have relied on informal sources like individual savings, informal loans from friends and relatives, remittances from relatives abroad and disposal of any assets they may have (Stein and Castillo, 2003). This has resulted in the building and improving of their dwellings incrementally as and when funds become available in what is referred to as the incremental building and financing process. This is the only way low and moderate-income households can get access to housing as they are being excluded by the formal financial institutions (Smets, 1999).

In Ghana, formal housing finance was very limited in scope and at one point between 1980 and 1990 it was almost absent. Political instability and Structural Adjustment Policies in the 1970s and 1980s respectively caused economic decline in the country and the banking sector was severely affected. High default rates, widespread fraudulent practices, general lack of expertise to appraise projects and the inability of the banks to engage with venture capital projects eroded public confidence in banks generally (Moss, 2003) which greatly affected the supply of formal housing finance in Ghana. In the early 1990s, the Ghanaian government in partnership with a private investor, set-up the Home Finance Company (HFC) to boost mortgage finance in the country. HFC was to operate as a secondary mortgage institution providing housing finance for the two-tier housing system. It was seen as a catalyst to jump start primary mortgages by banks after their restructuring (Moss, 2003). While this was a good move by government to revitalise the formal housing finance system, housing finance for low and moderate-income groups was not given any attention. It is estimated that 5% of Ghanaians own a house through their own resources, 60% of LMI Ghanaians need external finance to own a house and 35% will not be capable of owning or building a house in their lifetime GREDA, (1998) in Quayson, (2007). Little was done to assist LMI groups who constitute 60% of the total 24 million population who access funds from formal housing institutions.

Housing constitutes a major component of household wealth, especially for low-income households, and housing wealth is increasingly gaining importance in the Ghanaian economy. For many

households, it is the most important form of savings as homeownership is considered as a sign of wealth and prosperity. In other instances, it is utilised as collateral for borrowing by homeowners, thereby generating funds for other investments and wealth creation. Thus, the housing industry has the capacity to both cultivate and protect wealth.

Since Ghana's independence in 1957, the provision of housing has remained central to the development agenda. Various policies, programs and institutions have sought to address issues such as land tenure, land title regulation, and the provision of affordable housing units to the working population. However, a number of these housing strategies were negatively affected by a lack of funds, poor economic environment and the lack of private sector participation. Thus, compared with other advanced countries like India and South America, Ghana's housing industry remains rudimentary.

1.2 Problem Statement

The housing situation in Ghana has been described by various bodies as a sector in crisis. The regulatory framework is not very effective with regard to mortgage markets and there is a huge problem with respect to capital adequacy. Unlike other developing countries such as Malaysia where Malaysia pension funds are required to place 10% of their funds into real estate, this is not the case in Ghana.

However, since 2005 (after the Bank of Ghana created universal banking in Ghana), there has been an increasing and improved trend in mortgage provision. Improved macro-economic performance, new foreclosure laws and the introduction of Basle II requirements now address some of the issues of capital adequacy, which is helping to improve the supply of end user finance to the housing market. Many universal banks and other financial institutions like Ghana Home Loans Limited have entered the mortgage lending market with various types of housing loans currently on offer, but there is still a lot of work to be done in view of the fact that a significant proportion of the population cannot access and/or afford the mortgage products currently in the market. A study by Karley in 2009 gave an overview of the prospectus for Ghana's real estate market bringing together what is known about developments in the real estate market, identified the different factors that affect demand and supply, as well as assessing the market potential of the property market. The need for improvements in the housing finance system has been expressed in several studies and by different government and international agencies. Housing finance plays an important role in urban shelter development. It is also a key to poverty alleviation and livelihood diversification. However, most LMI groups in AMA depend upon informal sources of finance and personal savings to finance their housing needs. Considering the problem of accessibility of loans by LMI groups, there is a need

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to examine further the reasons why they do not access loans from formal and informal institutions. This research aims to investigate how LMI groups perceive housing finance products, their preferences, their reasons for borrowing or not borrowing, and their problems in accessing housing finance products in order that their needs can be improved and their needs for finance can be effectively met.

There is a high demand especially in the affordable housing bracket. The high and middle income earners mainly engage in self finance or take advantage of the few mortgage facilities available. This is beyond the reach of the majority of the population who are outside these income brackets. There is currently a housing deficit of nearly one million units (as at 2009) for a total population of just about 23 million people (2000 Population and Housing Census). A total of 150,000 units per annum are needed to cater for this deficit. Unfortunately less than 40,000 units are available every year. Consequently, the total deficit will grow to a staggering 2.5 million by 2020 if efforts on the supply side are not stepped up (GREDA, 2008).

The lack of available and accessible housing finance has been identified by the Government of Ghana as one of the important hurdles in improving the housing conditions for middle and lower income households. Housing, especially housing that is affordable for low-income people, is highly complex and capital intensive for all parties involved. "This is especially the case for poor people themselves who must apply their scarce savings and abundant social networks, both of which are manifested in many forms, to create shelter and an asset for their families and themselves. It is also one of the oldest economic development activities and many expensive lessons have been learned in the field". (CHF International, 2004).

1.3 Research Questions

Evolving from the problem statement discussed above, the main objective of this research study is to investigate financing urban shelter options to LMI earners in the Accra Metropolis where the majority of the people do not have access to loans or mortgages.

The study is specifically interested in providing appropriate answers to the questions below:

    i.   Have conventional methods of financing urban shelter captured the groups that need their intermediation?

    ii.   What is the extent of financial intermediation to LMIs?

    iii.   What challenges can be identified that determine how LMI earners access urban shelter finance?

    iv.   How can the defined extent of financial intermediation for LMI earners be achieved?

1.4 Research Purpose and Objectives

A. The primary objective

To investigate financial intermediation for urban shelter, to Low and Middle Income (hereinafter referred to as LMI) groups in the Accra Metropolis who cannot afford or access finance to purchase affordable and adequate residential units. The study will also examine the remaining challenges that must be overcome if Ghana's formal housing finance market is to reach maturity or a sustainable approach that encompasses all.

B. The secondary objectives are:

   i)   To examine the methods of financing urban shelter to LMI earners in Ghana.
   ii)   To investigate financial intermediation to LMI earners.
   iii)   To identify and analyse the challenges to intermediating to LMI earners to access urban shelter finance.

1.5 Research Design

The conceptual framework (theoretical frameworks) is an intermediate theory that will connect all aspects of inquiry (for example the problem definition, purpose, literature review, methodology, data collection and analysis). This forms the map that gives coherence to an empirical inquiry of a mixed method triangulation design (Creswell, Plano Clark, et. al, 2003). A mixed method descriptive research is used for frequencies, averages and other statistical calculations. The purpose of this design is "to obtain different but complementary data on the same topic" (Morse, 1991, p. 122) to best understand the research problem. Prior to writing the descriptive research, a survey investigation is conducted where a sample population of 75 respondents is sampled to access the challenges encountered by low and moderate-income (LMI) groups working and living in Accra who usually would not gain access to housing finance due to low irregular incomes which are inadequate to service loan repayments. Also, part of the target population is financial institutions both formal and informal, who may offer products that are suitable and tailored for LMI earners.

The intent in using this design is to bring together the differing strengths and non-overlapping weaknesses of quantitative methods (large sample size, trends, generalization) with those of qualitative methods (small N, details, in depth) (Patton, 1990). The nominal level of measurement describes variables that are categorical in nature which include demographic characteristics like sex, race, and religion.

This design and its underlying purpose of converging different methods have been discussed extensively in the literature (Jick, 1979; Brewer and Hunter, 1989; Greene et al., 1989; Morse, 1991). This design is used by the researcher to directly compare and contrast quantitative statistical results

with qualitative findings or to validate or expand quantitative results with qualitative data. Qualitative research often has the aim of description and the researcher may follow-up with examinations of why the observations exist and what the implications of the findings are. Quantitative methods will be used to seek empirical support for such research hypotheses.

1.6 Description of Research Area

Ghana lies at the centre of the West Africa coast. The country shares borders with the three French-speaking nations of Cote d'Ivoire to the west, Togo to the east and Burkina Faso to the north. To the south are the Gulf of Guinea and the Atlantic Ocean. It covers a total area of 238,533 square km, about the size of Britain. Accra is the capital and largest city of Ghana.
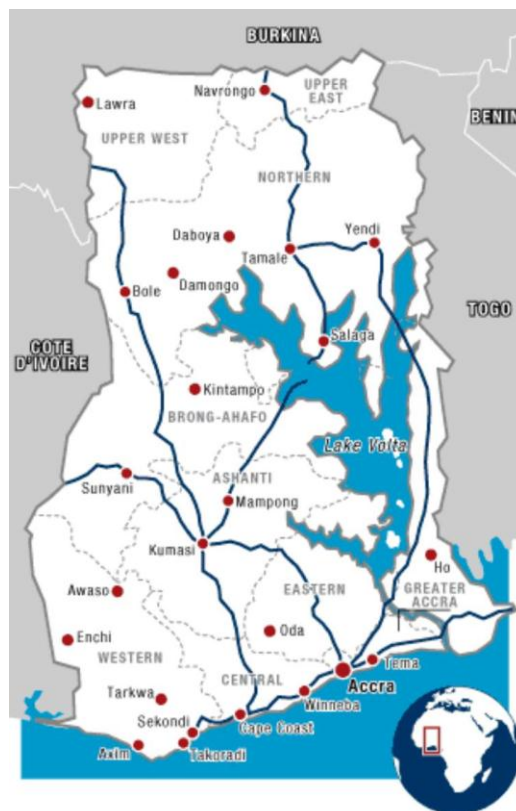
Figure 1.1: A Map of Ghana
Source: www.worldatlas.com Accessed: 15/03/2012

GSS 2010 provisional results indicate that Accra is one of the most populated and fastest growing cities in Africa with an annual growth rate of about 2.8% and a total population of about 3.9 million people. The results show that there is increasing demand for land by the population. The population density has almost doubled from 52 in 1984 to 102 persons per square kilometre in 2010 with densities exceeding 250 persons per square kilometre in low-income areas dominated by immigrants accounting for about 44% of the population in depressed communities and the indigenous areas like Accra New Town, James Town and Ussher Town.

Accra is also the capital of the Greater Accra Region and of the Accra Metropolitan District, with which it is coterminous. It is furthermore the anchor of a larger metropolitan area called the Greater Accra Metropolitan Area (GAMA) that includes eight districts namely Accra Metropolitan, Tema Metropolitan, Ga East Municipal, Ga West Municipal, Ga South Municipal, Ledzokuku-Krowor Municipality, Ashiaman Municipal and Adenta Municipal. The GAMA is home to about four million people, making it the largest metropolitan conglomeration in the country by population. As a primate city, Accra is the administrative and economic hub of Ghana.

For the purposes of this study the Accra Metropolitan is the chosen study area. It is a cosmopolitan city with a diverse population. In terms of political administration, it is the metropolitan capital of the Accra Metropolitan Assembly (AMA) which is made up of six sub metros namely Okaikoi, Ashiedu Keteke, Ayawaso, Kpeshie, Osu Klotey and Ablekuma.
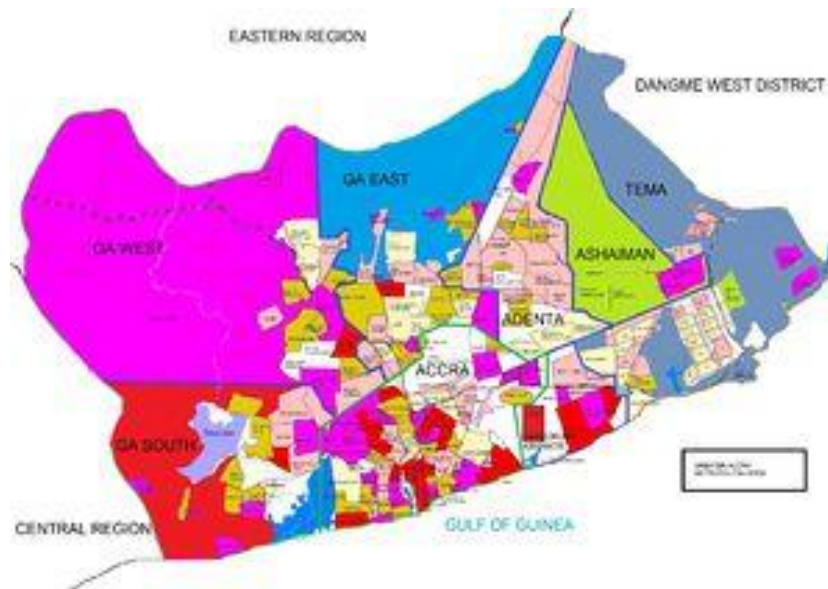
Figure 1.2: A Map of the Greater Accra Metropolitan Area
Source: Ghana Lands Commission 2009

In terms of housing characteristics, housing has been grouped into three main categories: low-income, middle-income and high-income areas. The low-income areas consist of both indigenous and non-indigenous (dominantly migrant) areas which include Adedenkpo, Chorkor, Jamestown, La, Nungua, Osu, and Teshie while the low-income non-indigenous areas comprise Abeka, Bubiashie, Kwashieman, Maamobi, Nima, Odorkor and Sukura. The non-indigenous housing areas consist of mainly migrants and most of the informal businesses are located in these areas. There are also informal settlements that have grown ubiquitously alongside the railway lines and places where the informal sector is active. Among the most noticeable settlements are the Agbogbloshie and Ashieman areas (CHF, 2004).

The inner-city area has a mixture of high income areas with low-density development and under-utilised service infrastructure and the indigenous, low class, high density development with depressed conditions and over stretched infrastructure. The peripheral areas of the city consist of haphazard residential development with minimal sufficient infrastructure. The housing conditions are generally depressed in low-income areas with such materials as mud, untreated timber, and corrugated iron roofing sheets for walls. Housing in these areas is characterised by haphazard developments, inadequate housing infrastructure, inadequate drainage, corrosion and high population concentrations. Middle and high income areas however have better quality housing.

1.7 Justification of Study

Housing markets are critical to economic growth, social shelter and financial sector stability. In emerging economies, the demand for housing finance increases as a result of urbanisation, demographic and economic growth. Housing finance accounts for a sizeable part of the financial sector, and accessibility is critical to its overall soundness. The recent global crisis, even though it created uncertainties, also stresses the importance of tailoring adequate solutions to ensure sound and accessible systems.

Housing finance markets have been changing dramatically in Ghana. As housing finance keeps growing to match the rising demand for housing, the challenge is providing affordable housing which is "reasonably adequate in standard and location for lower or middle income households and does not cost so much that a household is unlikely to be able to meet other basic needs on a sustainable basis.". New risk management approaches, business models, funding tools, and policy instruments can help expand markets, increase access to affordable housing, and contribute to the country's strategies for sheltering the poor. Many questions remain unanswered about the right balance between innovation and regulation, the extent of risks to the financial system, on the one hand and appropriate measures for promoting affordable housing on the other. These are the questions that this study aims to address by setting out best practices' and a sustainable approach that will benefit all citizens of the country.

Ghana is transforming its housing finance systems and both policy makers and private practitioners need cutting-edge information on innovation in the sector. This study addresses that need by providing an intensive view of changes in policy innovations and institutional, financial and managerial aspects of housing finance that is focused on the Accra Metropolitan Area.

1.8 Scope and Limitations

The challenges of urban shelter finance despite the existence of formal and informal property finance forms the research scope of this study for which the literature review gives the reader a picture of the situation on the ground by quoting both local and a few international authors. The focus of this research is on urban shelter finance, which is defined as the delivery of a large loan for strictly urban shelter development purposes, and financial intermediation which often finds its way into urban shelter development (Tomlinson, 2007). It maintains focus on the issues that determine access to mortgage finance by low and moderate-income (LMI) earners in the Accra Metropolitan Area to establish deep contextualisation of low income housing finance upon which future models may be premised. It is not drawn into the broader issues of urbanisation, and the upgrading of informal settlements. Nor does it bare focus on the Economic Community of West African States (ECOWAS) because of time and financial constraints the study is limited primarily to the focus chosen geographical location of Accra, Ghana to illustrate specific challenges faced by LMI groups in the country. The study intends not to depict a generalised study approach but to illustrate a specific chosen data sample and country.

1.9 Structure of the Research Report

The research report is structured into five chapters:

Chapter One: Introduction: This chapter introduces the research by giving the background to the study. It provides a detailed analysis of the problem statement for which research questions and objectives are formulated, with the research method to be undertaken. The description of the research area, justification of the study, and, the scope and limitations are then discussed to provide more understanding on how the research is to be done. This chapter was previously submitted as a synopsis of the study which guides and links the development of the whole research.

Chapter Two: Literature Review and Theoretical Framework: This chapter reviews the literature. It provides a description of the housing context, the demographics and macroeconomics, the finance systems used in housing and ensures that the housing policy issues have been discussed. It concludes by analysing the provisions of housing finance *and* the interplay of improving the housing financial markets with added focus on assistance by financial intermediaries to low and moderate-income groups. Theoretical perspectives on loan administration procedures, risk, constraints and risk management strategies for housing finance are discussed. Based on the theories of housing finance, a conceptual framework is developed.

Chapter Three: Research Design: The research design provides a detailed explanation about the process, the methods and the various stages when implemented during the study. Thus, the chapter details the research paradigm, methodology and methods of data collection, sampling techniques, tools chosen for obtaining data in the communities selected and presentation of the data. In addition, the chapter indicates specific stages for the research process as well as detailed steps for the administration of questionnaires and interviews conducted during the field work.

Chapter Four: Research Findings and Analysis: The data collected is collated and presented in this chapter. This data is presented in line with the research questions and objectives.

Chapter Five: Conclusions and Recommendations: The main findings of the study are presented, along with their implications and conclusions. In addition, recommendations for improving aspects of housing finance and for improving the housing financial markets are drawn in this chapter. Thus, the chapter synthesizes the major findings from the preceding chapter (chapter four) and offers recommendations to improve the decision making process.

2. A REVIEW OF HOUSING FINANCE LITERATURE AND BACKGROUD IN GHANA

"The overall achievements of markets are deeply contingent on political and social arrangements"
- *Amartya Sen (Development as Freedom)1999*

"I see the market as a powerful instrument for doing good – but one which has not only not lived up to its potential, but has, in the process, left some behind, and actually some worse off"
- *Joseph Stiglitz (The Roaring Nineties)1990*

"People respond to incentives: all the rest is commentary"
- *Steven Landsburg (The Armchair Economist)1991 p.3*

2.1 Introduction

This chapter reviews the published literature and discusses the concepts of housing finance development for shelter to low and moderate-income households in Ghana. As a tool for building effective demand for housing, the chapter discusses how housing finance arises out of the interplay between the housing market and the financial market. The housing market includes the supply of housing whether for ownership or rental in both the primary and secondary markets. This depends on the availability of land, functioning property markets and, in the case of mortgage markets specifically, a functioning deeds registry. The literature reviews how the housing finance market is determined by the financial market and how it operates within the broader, macroeconomic framework of a country or region, the risk management practices and requirements that prevail, various balance sheet constraints (influenced by both national and international fiscal policy, as well as by bank strategy), functioning property markets and foreclosure potential, investor interest and competing asset classes, and market infrastructure (Walley, 2011). The above factors reviewed in the literature helps in the understanding of the environment in which housing finance can be offered, and this in turn creates the effective demand for housing which itself drives the housing market and frames, in part, the housing interests of the financial market.

2.2 Housing Finance

Housing finance is a broad topic, the concept of which can vary across continents, regions and countries, particularly in terms of the areas it covers. For example, what is understood by the term "housing finance" in a developed country may be very different to what is understood by the term in a developing country.

The International Union for Housing Finance, as a multinational networking organisation, has no official position on what the best definition of housing finance is. The selection of quotes below is a snapshot of what housing finance as a topic covers:

"Housing finance brings together complex and multi-sector issues that are driven by constantly changing local features, such as a country's legal environment or culture, economic makeup, regulatory environment, or political system" (Loïc Chiquier and Michael Lea 2009)

"Put simply, housing finance is what allows for the production and consumption of housing. It refers to the money we use to build and maintain the nation's housing stock. But it also refers to the money we need to pay for it, in the form of rents, mortgage loans and repayments." (Peter King 2009)

The housing finance market is among the most important what in the economy. It accounts for a sizeable portion of the production activity of a country, through its backward linkages to land markets, building materials, tools, durable goods, and labour markets. Housing markets have significant forward linkages with financial markets. Mortgage debt accounts for a large portion of household debt and, through secondary markets and securitisation housing market supports the efficient functioning of domestic and international financial markets. Housing markets are routinely monitored as an important leading indicator of overall macro-economic activity. The housing finance sector has a tremendous development impact, both in terms of providing social stability and in promoting economic development.

2.2.1 Economic Background

With a population of about 22 million, Ghana currently has a labour force of 10.8 million; and its economic fortunes are looking brighter with a per capita income which has in turn increased from US $264 in 2000 to US$ 670 for 2007 (Ghana Statistical Services, 2007). Economic performance has improved in recent years. Figure 2.1 below illustrates the Gross Domestic Product (GDP) in Ghana contracted 5.10 per cent in the first quarter of 2011 over the previous quarter. Historically, from 2006 until 2011, Ghana's average quarterly GDP Growth was 1.58 per cent reaching an historical high of 5.30 per cent in March of 2008 and a record low of -5.10 per cent in March of 2011.

Ghana Annual GDP Growth Rate
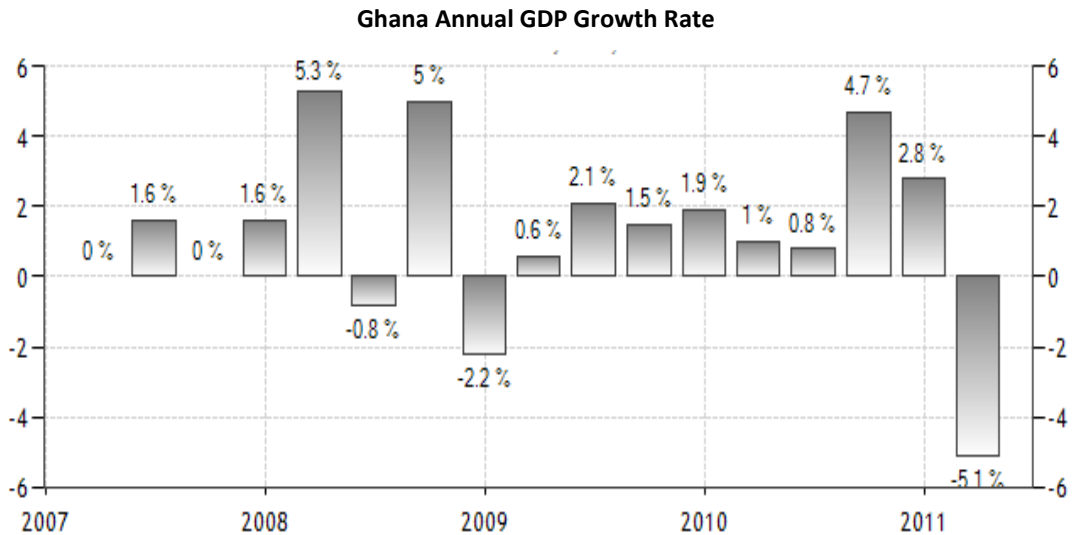
Figure 2.1: Ghana Annual GDP Growth Rate
Source: TradingEconomics.com; Ghana Statistical Services (2007-2011). Accessed: 08/07/2011

Ghana, ranked 16th out of the 53 African countries, has one of the highest GDP per capita in West Africa. The country has a diverse and rich resource base with gold, timber, cocoa, diamonds, bauxite, and manganese being the most important source of foreign trade. In 2007, an oilfield which may contain up to three billion barrels of light oil was discovered. Yet, in spite of an abundance of natural resources, a quarter of the population lives below the poverty line.

Average annual inflation has declined from a peak of 25.2 per cent down to 14 per cent and 11 per cent during 2007 (Housing Finance International, 2007). The inflation rate was at 8.4 per cent in July of 2011. Figure 2.2 below illustrates historical data for Ghana's Inflation Rate between 2007 and 2012. Inflation has eased since reaching a high of 20.7 per cent in July 2009. A 30 per cent increase in petroleum costs pushed the inflation rate to 9.2 per cent in May 2010. The inflation rate in Ghana was last reported at 8.6 per cent in February of 2012.

Ghana Inflation Rate
Annual change on consumer Price Index
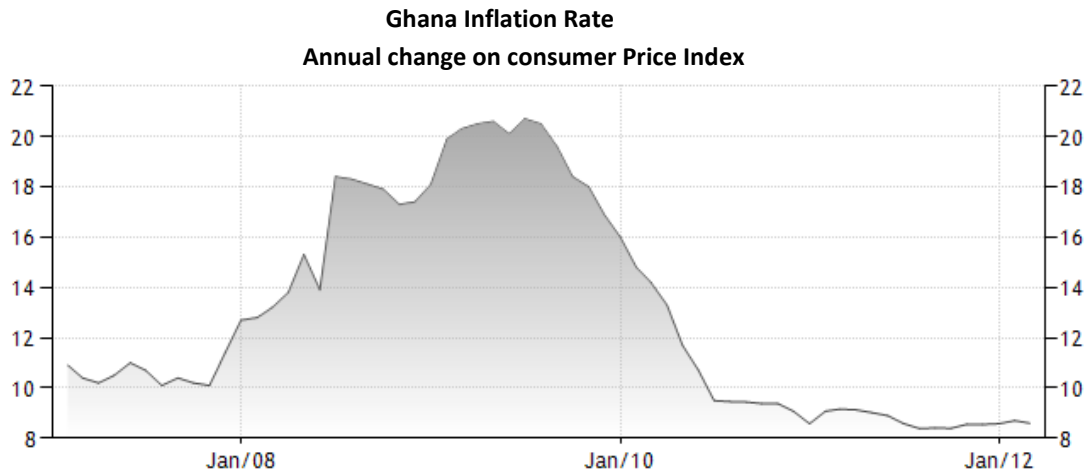
Figure 2.2: Ghana Inflation Rate
Source: TradingEconomics.com; Ghana Statistical Services (2007-2012). Accessed: 25/04/2012

An analysis of housing conditions reveals that on a national basis, 48.9 per cent of all Ghanaian households live in accommodation associated with the compound (44.5 per cent live in compound rooms). Another 25.3 per cent live in separate houses and 15.3 per cent reside in semi-detached houses. (GSS 2008)

Urbanisation is seen to have a major impact on the housing situation in Ghana. Ghana like many other developing countries is faced with a high population growth rate, high urban migration and low incomes for the majority of the population. The explosion of the urban population from 18 912 079 in 2000 to 23 646 912 in 2010 (GSS 2005a, pp. 219-230) has created a sizeable demand for housing finance that cannot be ignored if the basic housing needs of the burgeoning cities are to be satisfied. The need for more and better housing is not restricted to urban areas. Poor people living in rural areas have similar concerns, which also need to be addressed.

The Ghana Real Estate Developers Association (GREDA, 1998) notes that only 5% of prospective owners acquire houses from own resources. 60% need some form of financial assistance while the remaining 35% are not capable of building and owning a house in their lifetime. Home ownership is considered to be very important in Ghanaian society because of its dual purpose of providing shelter, and as an indicator of one's social status and prestige. Between 1990 and 1998, the Social Security and National Insurance Trust (SSNIT) provided over 30,000 blocks of flats countrywide, principally in regional capitals like Accra, Cape Coast and Takoradi. However, as recent GREDA studies indicate, about 500,000 houses are needed annually to meet the growing demand. The cost of houses on the market – ranging from US$35,000 to US$350,000, is out of range for 95% of most households in Ghana.

The limited availability of finance and the stringent repayment procedures of lenders make it impossible for many people to redeem a loan within a short period of time. In a tight money market, housing is the first area to suffer, since neither the builder nor the consumer can readily obtain finance for housing. Indeed, many housing developers have difficulty in obtaining funding for their projects even in normal times.

2.2.2 Role of Financial Sector in Housing

The financial sector plays a pivotal role in the success of a vibrant and buoyant housing finance industry. Its role in the mobilisation and distribution of financial resources to various market participants and sectors in the industry cannot be underestimated. The financial sector in Ghana has helped in the transformation of illiquid assets into liquid assets for increased capital formation, and also in the pooling and allocation of risks inherent in the industry.

The Financial Sector Adjustment Program (FINSAP), initiated in the early 1980s, formed the building blocks for the restructuring of the Ghanaian financial system. FINSAP set out major stabilisation and structural adjustment policies that were aimed at restructuring distressed banks, improving savings mobilisation as well as increasing efficiency in credit allocation. The banking sector in Ghana has grown substantially with six banks entering the Ghana market since 2002 (Quayson, 2007), which are:

- HFC
- Fidelity Bank Limited
- United Bank of Africa (UBA)
- Guaranty Bank Limited
- Standard Trust Bank Limited
- Zenith Bank Limited.

The number of new banks in Ghana increased from 16 to 22 between 1995 and 2008. This increase occurred despite the Bank of Ghana (BOG) increasing the minimum stated capital requirements from Ghanaian Cedi (GHS) 200 million to GHS 70 billion which was about 36% of the Central Bank of Nigeria's requirement of an equivalent of over GHS 195 billion.

The development of housing finance in Ghana can be attributed to a multiplicity of factors. Key among these is the macroeconomic environment. Macroeconomic instability, reflected by high and intractable inflation, high interest rates with huge spreads and a weak and volatile local currency, has characterised the economy over the past two decades. Since these instability factors are

interrelated, they created disincentives for investments in long term instruments, required to finance long term projects like mortgages for houses. Ghana has long battled with high inflation rates with single-digit inflation remaining elusive. The early part of the 1990s was characterised by rising inflation; the year-end inflation rate peaked at 59.5% in 1995. The government's aim of halting the rising trend in inflation, both to restore macroeconomic stability and stay within the limits agreed with the International Monetary Fund (IMF), compelled the Central Bank to tighten monetary policy. This helped inflation fall to an annual average of 12.4% in 1999. However, between 2000 and 2003 the average inflation rate soared to 25%, following the collapse of the cedi in 2000 and rising international oil prices. Although tighter fiscal and monetary policies did help to prevent inflation from moving higher over this period, the impact of higher fuel and other import prices proved difficult to control. In 2004, Government subsidies helped to keep domestic fuel prices low, which ensured considerably lower inflation, but rising food prices and increased government spending ahead of the elections meant that single-digit inflation remained elusive, and the inflation rate averaged 12.6% for the year. The high level of inflation coupled with cumbersome foreclosure, land titling problems and non-availability of long term funding, deterred most banks from entering into the mortgage lending business (Quayson, 2007).

2.2.3 Legal and Regulatory Reform

In view of economic circumstances, the International Finance Corporation (IFC) proposed a three year program to tackle some of the outstanding housing finance issues in Ghana (Quayson, 2007). The legal foreclosure procedures for mortgages in Ghana did not guarantee a lender's ability to realise their collateral in case of a borrower's default; hence the banks were reluctant to operate in the mortgage market on a large scale.

To address this issue IFC, in collaboration with the SECO and the Financial Sector Strategic Plan (FINSSP) of the Ghanaian Government, commissioned a review of the current legal framework to enable housing finance and mortgage finance providers to enforce mortgages in a cost-effective manner. It was expected that the review would result in the promulgation of a Collateral Security Act to provide a best-practice legal framework for the creation, registration, perfection, and enforcement of collateral in Ghana.

The program was unique in design as it coupled systemic legal and regulatory reform with key investments in mortgage origination and construction finance. It aimed at reducing the implied risks in mortgage financing by providing support to a mortgage law reform to be adopted by the Government of Ghana (GOG), time and delays to foreclose on defaulted borrowers to be reduced from up to five years down to 12 months maximum. The IFC Mortgage Toolkit provided guidance on

introducing new mortgage products, helping lenders establish standard loan documents and implementing key steps for originating, processing, closing, and servicing mortgage loans (Daily Guide, 2007). The standardising of mortgage products through a mortgage toolkit, which provides guidance on how to establish modern mortgage lending operations, with many financial institutions, the investment climate of local and international lenders will improve. This encouraged a reduction of interest rates, since the implied risks related to mortgage financing will be reduced by a better legal environment, better underwriting procedures and most of all a rising confidence that a mortgage is worthy in a sense of a good marketable security (Ansah, 1996).

2.2.4 Policy Orientation and Housing Delivery

The provision of fundamental human rights and freedoms are entrenched in Articles 12 to 33 in Chapter 5 of the 1992 Constitution of Ghana. The rights, duties, declarations and guarantees relating to the fundamental human rights and freedoms specifically mentioned in this Chapter shall not be regarded as excluding others not specifically mentioned which are considered to be inherent in a democracy and intended to secure the freedom and dignity of man. The Constitution of Ghana does not expressly protect the right to adequate housing. It nevertheless provides for the right to own property alone or in association with others, the right of non-interference with the privacy of one's home as well as protection from deprivation of one's property, all of which can be found in Chapter 5 of the Constitution. In addition, article 11 of the Constitution provides for the recognition of the existing laws of the land as part of the laws of Ghana, thus making the Rent Act of 1963, the Conveyance Decree of 1973 and related regulations those which govern accommodation in the country. The right to adequate housing is intricately linked to the enjoyment of other human rights like security of person, education and health.

The Centre for Public Interest and the Centre on Human Rights and Evictions (both NGOs) have organised training programs on Housing Rights for civil society. Sensitisation workshops have been organised for the need for judges and lawyers to recognise the right to housing based on Ghana's international obligation to housing rights instruments and how other countries have progressively used these instruments domestically. For the purposes of developing responsive housing policies, relevant ministries need to effectively collaborate and work as a team, for example, the ministries for housing and works, local government, energy, manpower development, and women and children, education, and health.

Upon attaining Independence in 1957, the Government of Ghana (GOG) adopted a policy of direct intervention in the housing delivery process with the establishment of:

- The State Housing Corporation
- Tema Development Corporation
- The Bank for Housing and Construction
- The State Insurance Corporation

Over the years all of the government housing initiatives which have tended to be ad-hoc and not products of a comprehensive housing policy have failed to effectively address the national housing problem in a sustainable way. In difficult circumstances, self-financed housing construction mechanisms evolved which today account for about 80% of new developments in Ghana:

i)   *Achievements:* For the nation as a whole, the number of persons per dwelling unit fell from 10.57 to 9.05 from 1960 to 1970, but by 1980 it had increased again to 10.1 by 2000 it was down again to 5.1, an indication that an improvement of 60% had taken place in the housing situation. UN-HABITAT and Government through a roundtable meeting on the 25-26th May 2005 brought all stakeholders together to deliberate a communiqué to discuss possible ways of addressing the issue and decide on a roadmap towards a reviewed housing policy. Ghana together with UN-HABITAT organised a high level peer exchange on the enablement of private sector lending for affordable housing. It provided participating countries an opportunity to share experiences on how best governments could support the private sector and domestic financial services industry to invest in affordable housing. Ghana hosted the 2007 African Union for Housing Finance (AUHF) conference, which aimed at formulating strategies for innovative housing finance products. The theme of the conference, held in Accra from the 17th – 21st of September, was "The future of sustainable housing systems towards affordable housing and infrastructure" (UN-Habitat, 2008).

Preceding the Annual General Meeting (AGM) a training program focused on various topics under "Loan Origination and Servicing in Effective Housing Finance Management". The AUHF AGM and conference and housing finance training program were sponsored by Home Finance Company (HFC) Bank, IFC and The Netherlands Development Finance Company (FMO), the Ghana Housing Finance Association, other local and international agencies (UN-Habitat, 2008). The conference would identify challenges and potential for micro housing finance to support upgrading activities such as affordable housing and infrastructure.

ii)   *Best Practices:* To address the problems of the housing sector in Ghana, President John A. Kufuor, announced in the State of the Nation Address in 2005 the commencement of a program to build 100,000 housing units over a ten year period, through Public-Private

Partnerships aimed at providing decent, affordable accommodation for middle and low-income groups. Government alone has committed to date over of GHS 35 million (about USD 35 million) for the Affordable Housing Program. Work was on-going at six sites in five regions of Ghana, namely Borteyman-Nunga in Accra, Kpone near Tema, Asokore-Mampong near Kumasi, Koforidua, Tamale and Wa. For the first phase, it was anticipated that a total of about 500,000 housing units will be completed (GREDA, 2008). The one and two bedroom housing units are contained in four-storey high blocks. These new townships will have modern amenities such as schools, clinics, commercial centres, recreational grounds, places of worship and light industrial areas. The units will be for sale and rental because Government recognises that not everyone within the target group can afford to buy and own a house.

iii)   *Challenges and Constraints:* Rapid population growth and increasing urbanisation have made shelter one of the most critical problems currently facing the country. Increasing overcrowding, declining quality and access to services characterised much of the housing stock in Ghana in 2008. The shortage of housing grew considerably worse during the intercensal period 1970 to 1984.

Various data suggest that the housing deficit by 2010 will be in excess of 500,000 units whilst supply figures vary between 25,000 and 40,000 units per annum as against an annual requirement of 70,000-100,000 units (UN-Habitat, 2008). As of 2008, the national housing supply to demand ratio (for new housing) is estimated at about 35%. The inability of housing delivery systems to meet effective demand over the years has created strain on the existing housing stock and infrastructure, especially in urban areas. The housing needs of urban inhabitants are often restricted to sub-standard structures and unsanitary environments in squatter and slum settlements. Slum creation has been the result of a recent upsurge in rural-urban migration, due to a limited supply of land, more poverty, less work opportunities, limited education opportunities, fewer medical facilities and regulatory frameworks that are not addressing the needs of the urban poor. In 2001, the slum population for Ghana was estimated at 4,993,000 people growing at a rate of 1.83% per annum scattered in all major cities in the country and is expected to reach 5.8 million by 2010 (Government of Ghana, 2005). The market for land in Ghana is highly unorganised. Information about who owns what piece of land is not readily available and the legal and administrative systems for transferring title are very cumbersome. These features have serious repercussions on the housing supply. Currently, property transactions are time-

consuming, very costly for a country still aspiring to reach an average per capita income of USD$1,000 by 2015, family houses in central Accra are typically going for around 100 times that figure and the financial institutions are unwilling to extend credit to property holders without clear title.

The key national priorities, initiatives and commitments that the country intended to undertake to overcome the above challenges and constraints to improve the housing rights situation on the ground are President John A. Kufuor's reiteration of the challenge of urban housing in his state of the Nation Address to Parliament on 3rd February 2005 when he identified the lack of adequate and affordable housing as one of the critical problems faced by the nation. More importantly, the President announced the government's intention to initiate a review of the national housing policy for a more realistic and responsive framework, which would deal with low-cost housing. The expressed intention of the government to partner with the private sector in addressing the problem of housing adequacy and affordability reflects the recognition of the need for increased participation of non-public actors in housing. Ghana is in the process of preparing a shelter policy with the ultimate goal of providing adequate, decent and affordable housing which was accessible and sustainable with infrastructural facilities to satisfy the needs of Ghanaians. The National Land Policy (NLP) (1999) provides a comprehensive framework for dealing with land constraints and providing the legislative and institutional framework for land management and administration in the country, taking into account the provisions of the 1992 Constitution on private property ownership, compulsory land acquisition, public lands, and stool and skin lands management.

On-going and planned capacity-building and technical assistance activities that contribute to the progressive realisation of the right to adequate housing, by UN-HABITAT, humanitarian NGOs and Government have been advocating for the promotion of the right to adequate shelter and other human settlements issues especially with regard to the poor. The GOG has been organising training programs for all stakeholders involved in the shelter policy for the various processes the document has to go through. UN-HABITAT provides technical and financial support for the completion and publishing of the Shelter Policy Document. The GOG under the Land Administration Project (LAP) which was implemented from 2004-2008 had undertaken reform and capacity building for comprehensive improvement in the land administration system. It is envisaged that the problems in the land sector will be solved through the implementation of the Ghana Land Administration Project (LAP).

2.2.5 Socioeconomic Development Analysis – Housing Affordability

Housing production, access and affordability are greatly influenced by socio-economic changes that take place in society, for better or for worse. Social development is an integral part of the pursuit for economic growth and sustainable development. People who are educated and trained, who are in good health, and who benefit from decent and secure living conditions in an environment ensuring the exercise of human rights and fundamental freedoms are happier and more productive than those who are deprived of these various amenities. The analysis of the social development situation in Accra focuses on population dynamics, poverty, health, nutrition, education, housing, labour employment, water and sanitation (Konadu-Agyemang, 2001).

a) Population

The 2000 national Population and Housing Census indicated that Ghana's current population stands at 23.8 million people in 2009 from 6.8 million in 1960, changing 251 per cent during the last 50 years. The population density per square kilometre in Ghana was 1,205 in 2010 up from 995 in 2000 (World Bank, 2011).
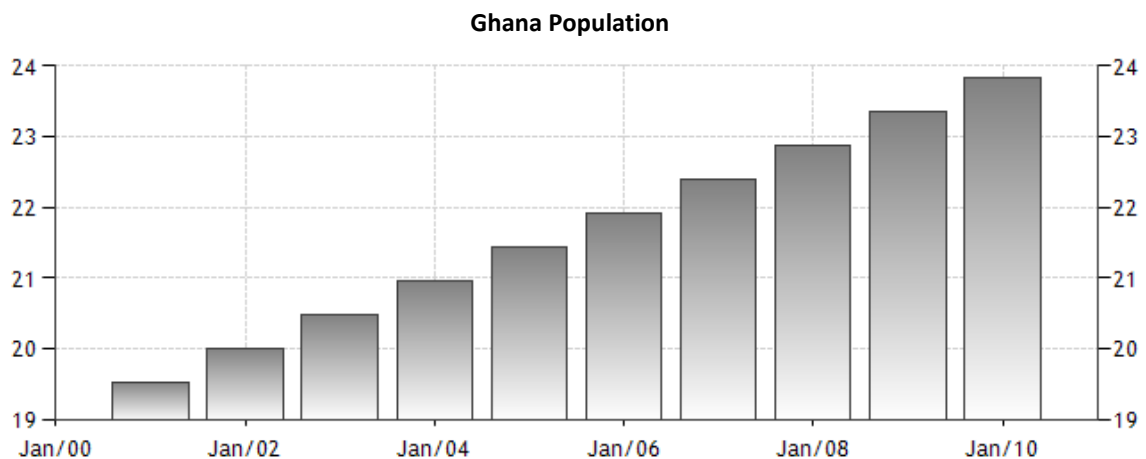
Ghana Population

Figure 2.3: Ghana Population
Source: TradingEconomics.com; World Bank. Accessed: 04/10/2011

The population density of three regions particularly reflects the pressure on resources. Greater Accra is much higher than any other region in the country because of its small land area. The fact that the capital of Ghana, Accra, (Figure 2.4 below) is located within this region accounts for the high population and high urbanisation, which is still relatively low compared to the northern and eastern regions of Ghana.
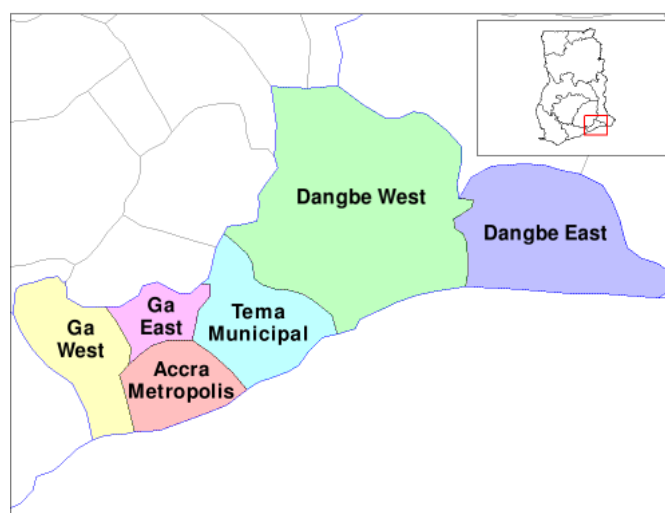
Figure 2.4: Location of Greater Accra Region in Ghana and Districts of Greater Accra
Source: Ghanadistricts.com

Table 2.1 below summarises the population by district from the 2010 census and the percentage of the total regional population in each district.

Table 2.1: Greater Accra Population by District (Ghana Statistical Services 2010 census data modified)

Districts	Capital	Population 2010	%Pop	Land Area (km²)	Density (per km²)
Ga West Municipality	Amasaman	187,139	4.88%	710	264
Ga South Municipality	Gbawe	269,297	7%	517	521
Ga East Municipality	Abokobi	278,102	7%	166	1,675
Accra Metropolis	Accra	1,854,189	48%	200	9,271
Ashaiman Municipal	Ahsaiman	187,304	5%	5	37,461
Adenta Municipality	Adenta	127,788	3%	220	581
Tema Metropolis	Tema	368,393	10%	565	652
Ledzokuku-Krowor Municipality	Teshie-Nungua	307,342	8%	50	6,147
Dangbe West District	Dodowa	129,181	3%	1,442	90
Dangbe East District	Ada Foah	124,248	3%	909	137
Total		**3,832,983**	**100%**	**4,784**	**56,798**

The Ghana population policy is to continue reducing the growth rate and to pursue activities that will lead to a better redistribution of population in the country.

b) The Extent of Poverty and Landlessness

Despite the provision of improved access to education, health care, safe water and other basic social amenities over the past decade, the social condition of many Ghanaians are characterised by low standards and generally poor quality of life. More than one-third of Ghanaians live below the poverty line and some 7% in hard-core poverty. Poverty is defined as an income less than two-thirds of the national average and hard-core poverty as an income of less than one-third.

Average annual income in Ghana is about GHS 1, 217.00 whilst the average per capita income is almost GHS 400. The National Tripartite Committee has pegged the new minimum wage at GH¢3.73 from the previous GHS 3.11. With an average exchange rate of GHS 0.92 (GHS9,176.48) to the US dollar prevailing in June 2006, the average annual household income was US$1,327 and the average per capita income is US$433 (Ghana Living Standards Survey Report of the Fifth Round (GLSS 5), 2008). There are regional differences with the Greater Accra region recording the highest income of GHS544.00 whilst Upper West and Upper East regions had less than GHS130.00. Urban localities had higher per capita income than rural localities.

The three main sources of household income in Ghana are income from agricultural activities (35%), wage income from employment (29%) and income from self-employment (25%). Remittances constitute less than 10 per cent of household income. The annual estimated total value of remittances received in Ghana is GHS547, 571 million whist the estimated total annual value of remittances paid out by households is GHS231, 344 million which represents 42 per cent of all remittances received. (GLSS 5, 2008).

Until recently landlessness in Ghana was not perceived to be a problem. Almost all communities were self-sufficient in their basic land requirements for subsistence and related needs, thanks to progressive customary tenurial systems (Kasanga, 2000). Emerging land use patterns, urbanisation, and gender insecurity especially in communities adjacent to sprawling urban centres pose problems. Rapid urbanisation is likely to threaten the overwhelming majority of the indigenous communities given their weakened or non-existent land rights, the lack of alternative sources of livelihoods and employment avenues. The current population growth of 2.6%, the growth of urban centres and their peripheries is likely to be at least double the national rate and it can be expected that the pressure of landlessness and homelessness on the poor and the very poor will be intense. The case of Ofankor lands, a peripheral community of the nation's capital, Accra, shows that the poor and indigenous communities are often the victims of land expropriation in government land which is subsequently allocated to individuals outside the community often with paltry compensation being awarded to the indigenous people (Kasanga, Cochrane, King and Roth 1996).

Besides high population growth pressures, rapid urbanisation and emergent informal land markets, many point to failures of formal land policy interventions by government at the misinterpretation and misapplication of the basic tenets of the law to the disadvantage of the poor and other vulnerable groups.

c) Housing needs and demand for low to moderate-income households

Housing remains one of the biggest social concerns of a large number of Ghanaians. In the urban areas, the problem is largely one of quantity and to some extent quality. In the rural areas, quality dominates the list of issues on housing. Recent trends in housing development include the following:

- The housing stock has marginally increased over the last decade, while the population has continued to increase faster, thus putting considerable pressure on availability and affordability.

- The average housing delivery rate of 40,000 units per annum was 40% below the targeted 100,000 units in 2007 projected forward for five years to totally overcome the country's housing deficit of 500,000 units.

- The delivery deficit was very pronounced in urban areas where it is important to decongest over-crowded housing units because of the health implications.

- The occupancy rate was about 7-12 persons per unit in some urban locations.

- Rural housing is predominantly of a low standard. Mud is generally employed and any other materials used are of very poor quality. Poor construction and maintenance are the norm.

- Affordability of housing units remains a major concern.

Housing need is defined by the United Nations (UN) to include demographic, replacement and vacancy elements (Rakodi, 1992). In other words, housing needs result from population growth and new household formation, overcrowding, and when households are paying more than they can afford for housing. Housing need is considered to be an instrumental need because one cannot fulfil instrumental housing need without meeting our basic needs (King, 1999). King distinguished instrumental needs and basic needs. The formal "occurs because of particular ends we choose and the latter is what we have by being human". However, King argues that, need is a relative term and is best defined individually with a particular cultural context and that, if one chooses housing with a high level of amenity he must also fulfil his basic needs as well as high level needs.

For example, according to the United Nations Centre for Human Settlements (1996), low-income households spent a greater proportion of their income on housing than upper-income households and that the low-income groups have diversity of demand for housing.

This diversity arises from the fact that low-income groups may have nothing to spend on housing because all their income is spend on daily necessities (basic needs) and therefore how much income is available for housing affects their demand for housing. Again, the decision on how much to spend on housing is influenced by location, size and quality of the housing, infrastructure and services and the level of security (UNCHS, 1996).

Therefore, to be able to identify housing need for a particular income group, King suggests the separation of effective and non-effective demand.

Effective demand for housing is the willingness and the ability of households to pay for housing. It is a function of income and therefore, a potential home owner's decision on whether to buy, rent or improve their housing conditions is directly related to the following additional factors:

- "Income level and income uncertainty
- The cost of homeownership (For example: production cost, financing cost and availability, maintenance cost, taxes, absence of rent risk, etcetera)
- Household wealth or lack thereof (indebtedness)
- Life-cycle factors (migrants status, household composition and phase of household development)
- Housing risk (the variation of house-prices overtime)" (Hoek-Smit, 2002).

The measure of the proportion of household income that a household is willing to spend on housing is what is termed as housing affordability. However, other factors like the life cycle, price of housing and financing availability greatly impact on housing affordability of all income groups (Ballesteros, 2002). Therefore, the realisation of housing need is dependent on the availability of housing finance which propels the effective demand and affordability.

Housing finance enables the production and consumption of housing and also provides funds for building and maintenance of the nation's housing stock (King, 2002). Market-based housing finance systems have demonstrated they are the most effective way of providing financial resources for housing development (UNCHS, 1996). However, Smets (1999) argues that, housing finance will only be provided when the leaders are assured that the money will be repaid.

In determining the ability to pay, lenders consider the capital costs, financing terms, the size and regularity of housing income and physical possession and hence if a household fulfils these criteria, it is assumed that the willingness to consume housing will follow automatically (Smets, 1999). Smets, by referring to Hancock (1993), argues that housing is only affordable for households if after meeting the housing cost, that is, the repayment for a housing loan, the household still has some income left to meet the basic necessities of life without falling below the poverty line.

The housing need for low and moderate-income groups may include the following alternatives:

- To build a new home or procure a new house.

- To repair a deteriorating house.
- To extend an existing building or connect it to public infrastructure and,
- To maintain and improve an existing building to retain its value (Sarfoh, 2002).

These needs identify the need for different financing strategies as the quantum of need differs from one household to the other as well as the income levels of the respective households. For instance, those with high income levels might want mortgage finance to purchase a new building because they will be able to afford it while the low and moderate-income groups might opt for a finance type arrangement that will enable them to extend or improve their existing building (Sarfoh, 2002). However, few financial alternatives exist in many developing countries. Housing finance systems have often followed the formal finance systems where formal sector financial institutions provide credit for upper-income groups at market interest rates depending on certain qualification criteria. These formal sector financial institutions usually avoid getting involving in housing finance for the low and moderate-income groups for the reason that, the low and moderate-income groups are unable to provide the necessary collateral for housing loans and lack stable incomes (Stein and Castillo, 2003). Certainly, complete houses that are available through mortgage finance which the formal housing finance institutions target are well beyond the capacity and affordability levels of the low and moderate-income groups. In this situation, the low and moderate-income groups can only realise their housing needs by building incrementally, as and when finance becomes available (UNCHS, 2005).

d) Labour, Employment, Training and Skills

The principal sources of employment in Ghana are smallholder farming, artisanal fishing and small-scale trading. Formal wage employment, which is dominated by the public sector, is probably not more than 0.5 million out of a total estimated labour force of around 8 million. The measurement of employment is fraught with conceptual and practical difficulties, which explains why estimates of unemployment in Ghana vary so widely, from as low as 3% of the labour force to as high as 19%. However, the basic problem is not so much unemployment as the very low productivity and earnings of many of the people participating in some form of economic activity, especially those in the informal sector. This constitutes a serious under-utilisation of human resources as the productivity of people operating in the informal sector is much lower than they could achieve under more favourable conditions.

In recent years, the National Board for Small-Scale Industries (NBSSI) has strengthened its productivity enhancing programmes in training, advice and credit to small-scale entrepreneurs through its Business Advisory Centres.

In 1994, economic sectors and activities with the greatest potential for productive employment generation were identified and the National Network on Employment Capacity Building was established to oversee the formulation of medium-term National Employment Policy and the preparation and implementation of projects that would create sustainable jobs in the immediate future.

2.2.6 The Housing Finance System

Any system of housing finance is sustainable only if it is relevant to the economic, social, political and regulatory environment of the country concerned. The development of housing finance in Ghana is directly related to housing policy initiatives and performance of the macroeconomic indicators. Therefore, the performance of the housing finance industry before 1990 was largely led by the state. With the establishment of the State Housing Corporation (SHC) in 1955, government provided it with long-term funding for the construction and provision of housing finance to Ghanaian workers. Housing loans were subsidised through a fixed rate long-term loan. With time government could not sustain the funding due to pressure to provide other services. It therefore could not make a significant impact in the housing market. Besides, the First Ghana Building Society (FGBS) which mobilised savings and lent to members for financing housing also ran into difficulties with the economic decline of the 1970s. High inflation rates and currency devaluation reduced the savings capacity of members and this led to a shortfall in funding for the organisation. This too had no major impact in providing sustainable housing finance for housing development (UNCHS, 2006b).

In attempts to salvage the situation, government established the Bank for Housing and Construction in 1972. This bank was solely responsible for financing housing and the construction industry. However, it diverted its attention from these core issues to commercial banking after the government was overthrown in 1979. It is now liquidated due to fraud (UNCHS, 2000b). During the same period the Social Security and National Insurance Trust (SSNIT) was given additional responsibility of providing housing to workers. However, its mandate was to provide rental accommodation to public sector workers at affordable rates with funds from their social security contributions.

There was limited involvement of private financial institutions in the housing finance market. The Ghana Commercial Bank got involved after the 1970s economic decline and provided limited mortgage finance to people who could afford it. The Standard Chartered Bank and Barclays also joined later but only targeted workers in multi-national corporations. All of these measures were short lived because of the crisis and structural adjustment policies which caused an economic downturn in the country.

By 1990, there was almost a complete absence of long-term mortgage finance in the country. Housing became unaffordable due to high lending rates and many banks did not want to venture into mortgage financing (UNCHS, 2006b). These problems led to the establishment of the Home Finance Company Limited (HFC) in 1990 with the core objective of providing sustainable housing finance systems in the country. It was to provide housing finance as a secondary finance institution through long-term funds from its initial capital and later through the issuance of bonds. HFC therefore, became the first mortgage finance institution in the country with the sole responsibility of providing housing finance. Their target group was moderate-income earners.

The proposed solutions to housing finance in Ghana over the last five decades have been by government directly or indirectly funding state and quasi-state institutions to carry out the task of housing finance. The SHC and Tema Development Corporation (TDC) were established and funded by government. Quasi-state institutions like SSNIT and FGBS were also under the ambit of government. There was little or no support or incentives for private institutions to take up the role of providing housing finance. The unstable macro-economic environment also did not permit private sector institutions to get involved as the sector became unattractive and risky. UNCHS (2006b) summarised this by stating *"government fiscal policy has provided incentives to housing construction and the rental market rather than to encourage housing finance as a means of homeownership"*. Hence there was a need to reform the banking sector to be able to attract more private banks to venture into housing finance, because the banking sector was a controlled regime where BOG determined the levels of sector-based allocations of credit to banks (UNCHS, 2006b).

2.2.7 Housing Finance Instruments

The mortgage deed or "the bond", as it is called in Southern Africa, is the main instrument utilised by housing finance institutions in Ghana. This constitutes a charge over the property as opposed to the earlier legal position involving a transfer of title to the lender, which gave it a more effective security.

Mortgage loan recovery has in many countries been difficult because of the very slow legal processes that must be observed before the lender can foreclose on the property. Under the Home Mortgage Finance Law of Ghana (1993), HFC and its OSIs have the right to foreclose without going to court in most cases. Where, however, repayment of more than 85% of a graduated payment mortgage has been made, foreclosure must be by court action. The company, however, takes guarantees and post-dated cheque's to avoid having to foreclose on too many properties. The greatest problems mortgage financiers encounter in Africa are difficult incorrect titling of land and slow inefficient registration procedures (Ansah, 1999).

The problems most common in Ghana are:

- Inefficient deed registration system.
- Unavailability of land in urban areas and high prices.
- Customary law practices go hand-in-hand with English law concepts of land title creating complex and unclear titles.
- Stamping and registration procedures are compulsory but the system is inefficient.
- Low incomes, high house prices, high inflation and high interest rates.
- Inadequacy of infrastructure and housing construction finance.
- Lukewarm attitude of the banks to long-term loans and in particular lack of interest in making housing loans to moderate- and low-income earners.

Since affordability is a major issue in housing rental and ownership, as far as the poor and low-income groups are concerned, it is necessary to review the Government's efforts directed towards shelter delivery including poverty reduction strategies. The purpose is to determine whether or not the need for housing, which is a basic right, is being met; and whether or not the instruments being used are the appropriate ones which make access to decent housing affordable to the poor segment of the Ghanaian society.

2.2.8 Lending Requirements

Banks in Ghana are mainly portfolio lenders whose general objective as mortgage lenders is to run a low-cost and low-risk business where mortgage lending fits well in relation to other activities. Although government policies back the private sector, the banks only offer a short-term funding model and do not lend on a medium- or long-term basis, thus crippling the housing industry. However, few banks endeavour to provide needed funds for long-term housing investment but in order to survive, the banks must make profit. To thrive, the return must warrant the investment of capital, and to grow the bank must accumulate retained earnings to support asset growth.

Therefore, for lending to take place, financial institutions would generally want to establish that certain basic requirements are met. These are categorised into five lending requirements called the five C's of lending decision, namely, character, capacity, collateral, capital and condition. These requirements relate to the circumstances of the potential borrower, the property and the environment in which lending occurs. The lender normally makes sure these basic requirements are fulfilled before lending. There may be other requirements to fulfil but for the purposes of this research report, the researcher is limited to the five Cs against which it is determined whether or not it is viable to lend (Karley, 2002).

a) Character

The lender wishes to transact business with someone who will respect the contract and observe the terms. The bank would ignore any potential borrower who is perceived as capable of repudiating the loan. Therefore, an attempt is made to establish whether or not the potential borrower is a person of good character, worthy of respect. In general, character is assessed by obtaining references from people who know the borrower, by examining the regularity of their bill payments previous credit records, source and stability of income and other personal attributes necessary. While banks in developed economies may be able to evaluate the character of the borrower with sufficient certainty it may not be so easy in Ghana. The impression gained at the first meeting with a lender is the starting point of the assessment and while it is possible to obtain references on borrowers in Ghana credibility may not be assured.

In Ghana many people are not accustomed to buying on credit, most have no credit records or bank accounts and there are no established credit bureaus to keep records of bill payments. So the character assessment or credit performance of LMI groups is unpredictable or cannot be completed. Typical lenders in Ghana have developed several methods of assessing the character of potential borrowers. For example, they use employers, community members, and pastors for character references, and sometimes gather other information on personal habits, contacts and actual sources of income for each applicant, but because such information is qualitative, the risk cannot actually be measured and, therefore, it is often hard to avoid an adverse selection of borrowers.

b) Capacity

Determining the borrower's financial ability and buying power is a critical aspect of the evaluation process. Typically, capacity is evaluated using the ratio that expresses the percentage of an applicant's income needed to cover monthly debt obligations, including the mortgage payment, and the house-debt-to-income ratio. This focuses on housing-related payments and is calculated as the ratio between monthly mortgage payments (including taxes and insurance) and gross monthly income. The total-debt-to-income ratio, which includes non-housing debt such as car payments and consumer instalment debt, is also often considered.

Assessment of financial capacity in Ghana is problematic. First, accurate income data are hard to obtain because, besides formal employment, most people derive additional income from the informal sector. Moreover, because most people receive salaries in cash they cannot prove their income. Even if sources of income are verifiable, wages are very low. The average cost of a decent low-income family house in Ghana (about 50million cedis) is more than ten times the average annual salary of most key workers in Ghana. Based on this example, the housing debt-to-income ratio

shows that most Ghanaians simply cannot afford decent housing. Only a few relatively rich people who are able to prove that their monthly loan repayment will take less than 35% of their official monthly income would probably be provided with housing funds. It is therefore not surprising that most mortgages in Ghana are mainly employees of private institutions and Ghanaians living and working abroad.

c) Collateral

The value of the property is an important asset upon which the loan is offered. The lender determines whether, in the worst-case scenario, such as repossession on default, the property can be sold to pay off the debt. Lending is normally against the value of the property based on the expert opinion of an attorney and appraiser. Suitability of the property for mortgage is assessed on the basis of the legal status of the property, location, structure, and the market value. The appraiser uses cost, income, and market approaches to estimate the property value. Attorneys, acting on behalf of lenders, ascertain the existence of the property and ownership from the deeds office to ensure that no other claim is imposed on it. Freehold properties are preferred because then the buyer owns the land so that the future prospects of selling will not be hampered.

In Ghana the situation with collateral risk is complicated. For example, the law is such that foreclosure proceedings are not straightforward. In the case of default, it is difficult to evict a borrower, especially if they have children. Also, because land is mostly communally owned, lenders would find it difficult to register mortgages on properties that are not freehold. It is also not possible for individuals to use land as collateral against a bank loan because they do not own the land themselves. Another problem concerns the structural aspect of the property. Unstable materials in housing construction offer inadequate security to lenders. The most common complaint in the housing construction industry is that of the use of unsuitable materials and the lack of basic infrastructure and amenities detracts from the value of property. Finally, the value of a property is often based on the sale prices of similar properties in the neighbourhoods, but the presence of uncontrolled settlements in most neighbourhoods is a potential source of problems for lenders in Ghana.

d) Capital

Housing finance usually requires long-term loans, which are often characterised by uncertain returns, and are generally regarded as risky investments. Therefore, the lender usually requires the potential borrower to demonstrate their wealth by making a financial stake in the property in the form of a down payment (deposit) towards the loan. It is believed that such a financial stake in the property motivates borrowers to make regular payments and keep the property in good condition. Normally an 80% loan-to-value ratio (LTV) is set as a regulatory benchmark, but depending on the type of borrower, the down payment requirement in Ghana is between 20% and 50% of the value of the property.

The deposit requirement is a big problem for many people because of the lack of savings. Although Ghanaians often participate in various savings programs through informal and formal mechanisms, many people who deposit money in their bank accounts often withdraw the money after short periods to meet the daily cost of living. For example, rough estimates show that over 90% of Key workers, whose salaries are paid through a certain bank in Accra, withdraw over 90% of their money by the next pay day. This implies that it would be difficult or take a very long time for such people to raise the minimum deposit required for a bank loan through savings. However, to overcome the deposit requirement some banks have developed schemes with certain private sector employees but such guarantees are usually valid only while the company employs the borrower. Moreover, most key workers are public servants and they do not have access to such schemes from the government.

e) Conditions

The nature of the lending environment is an important factor that affects the evaluation of mortgages. The state of development of the mortgage market depends in large part on the degree of macroeconomic stability the legal system, and the government policies in general. Government policies determine the competitive environment in which the mortgage is done and, therefore, affect the elements of the credit evaluation process. Economic conditions may subject the market to risk in diverse ways. For instance changes in inflation and interest rate could change the value of the mortgage. This risk is high in Ghana, as it is in all volatile economies with double-figure inflation rates.

As of August 2002 the Central Bank maintained its rediscounted rate at about 25%. The 91-day Treasury Bill discounted rate for example was 24.5% through August 2002. The commercial banks' borrowing rates were also generally stable throughout the year. Rates for savings deposits moved up slightly from 20%-25% to 20%-27% and the range for call money from 20%-30% per annum. As for

August 2002, the typical mortgage rate quoted by most lenders, especially HFC was 12.5% per annum, but where it is quoted in Ghana cedi, the mortgage rate is usually between 20% and 25% per cent per annum.

A high level of inflation implies a low expected return and therefore a high risk to the lender funding long-term loans. The borrower also suffers through diminished real income during inflation and high mortgage rates, which makes it difficult to maintain regular mortgage payments.

To mitigate the risk of inflation, most lending institutions, such as Home Finance Company (HFC), prefer collecting monthly payments in U.S. dollars which makes it difficult to rely on payments in hard currencies if mortgages are based in Ghana, given the depreciating trend of the value of Ghana's currency, the cedi, against the U.S. dollar.

It may be suggested that lending institutions in Ghana could eliminate the effect of inflation by linking payments to the rate of inflation or developing dual-indexed mortgage mechanisms, first introduced in Mexico in the 1980s. These mechanisms are complex, especially for people with no borrowing experience and it is doubtful that they can be used in Ghana. The above assessment of lending decisions and the viability of conditions in Ghana shows that lenders will generally provide loans if they perceive the potential borrower has the capacity and willingness to pay back the capital and interest as agreed. The few mortgage lenders in Ghana operate on market principles. They are naturally risk averse and therefore reluctant to offer loans to potential borrowers given that the financial, legal, and economic systems do not possess adequate measures to support the mortgage lending process.

What can be done to create opportunities for ordinary people to be able to afford decent homes? Perhaps we should go back to the basics. For lending to take place, financial institutions generally want to establish that certain basic requirements are met, as categorised above by Karley, into the five Cs. This is akin to the categorisation by Balchin and Rhoden (1998) which reflects requirements in more developed systems. This litmus test is applied to the potential borrower to assess the ability of the borrower to honour his or her part of the contract:

Condition – The economic climate has not been fertile for a rapid development of mortgage lending given the high rates of inflation with its resultant high interest rates and the currency depreciation which makes lending unfavourable for LMI groups because their incomes cannot cater for the economic fluctuations in the lending environment.

Character – Mainly refers to the capacity to access the likely behaviour of borrowers with respect to their loan as well as their home. Assessing the credit worthiness of the borrower is made difficult as

many potential LMI borrowers have only limited association with banks and the use of credit for transaction is uncommon.

Capacity – LMI borrowers are expected to pay the interest on the loan and the principal in the form of monthly or annual repayments or balloon payments. Given the repayment-to-income ratio (generally a maximum of 25%) and the low level of income in the country it makes it difficult for LMI earners to qualify (Debrah, Ibrahim and Rufasha, 2002; Boamah, 2003 and Asare, 2004).

Capital – Additionally, the large deposit (capital) required by the banks is a sufficient deterrent to a number of LMI borrowers.

Collateral – Lenders are interested in the quality and security of the property to be used as collateral. Over 10% of dwellings in the country fall short of the standard required as collateral (GSS, 2000). The Population and Housing Census Report (2000) shows that over 10% of dwelling units in the country are made of tent, kiosk, container and other non-durable structures. As a result lending is skewed towards the purchase of a new dwelling unit by LMI groups. As observed by de Soto (2000) in his illuminating book *The Mystery of Capital*, in many developing countries, rights to possessions are not adequately documented, cannot be turned into capital readily, cannot be traded outside local circles or used as collateral for a loan. In this context, many reasons have been put forward to explain the limited supply of mortgages to LIM groups in developing countries like that of Ghana.

2.2.9 Alternative Measures

The above discussions suggest that the main obstacles to access institutional funding for housing in Ghana relate to the under-developed financial and legal system and the unsophisticated nature of the economy. Thus, the need for government to concentrate effort on developing and strengthening Ghana's legal system, financial systems in general and housing finance systems in particular, as well as fixing the fundamental economic problems cannot be over emphasised. Several alternative measures from simple to sophisticated mechanisms may be taken to ensure that potential borrowers meet the basic lender requirements for mortgage provision.

The success of any method will certainly depend on how well it is adapted to local conditions. Given the stage of economic and financial infrastructure and the generally low-income of many people in Ghana, it appears that community development initiatives in the form of local mutual associations could create opportunities for decent home-ownership for the masses. Well-established mutual associations could operate very well in Ghana to overcome most, if not all, of the obstacles that prevent institutions from financing certain potential mortgage borrowers. That is to say, the principles underlying operations of mutual associations could be properly adapted to address the main problems associated with the basic requirements (the five C's) discussed above.

A mutual association is one based on the commitment of the local community to help itself. It is often developed through community initiatives, reflecting community ideals of co-operation, self-help, savings and home-ownership. The concept is not new in Ghana. Several mutual associations can be cited, including susu groups (savings mobilisers), building societies and credit unions, they are most common with local market traders, tradesmen, even some professionals and certain key workers in cities. Unfortunately, most of these associations were not able to realise their full potential. They needed support in the form of initial capital and infrastructure, like adequate office spaces and equipment, as well as some form of technical assistance to set up a sustainable institution. The lack of resources, coupled with mismanagement and corruption, led to failure and most of these associations and/or the activities of some being taken over by well-established financial institutions. The enthusiasm that followed the establishment of building societies in the 1970s to 1980s died out soon after due to lack of support.

2.2.10 Possible Alternatives to Lending Requirements

Mutual associations could help achieve the basic lending requirements and provide successful social structure for building home-ownership in lower and moderate-income communities if they were properly trained well managed and supported. For instance, well-established mutual associations could be helped by the government investing on a matching basis by the purchase of preferred shares in an amount up to equivalent of the investment raised locally. Local associations would be motivated to increase their contributions and savings if they believed that the government support would depend on their own contributions. At the point of credit evaluation, the assessment of the ability and willingness to pay back loans would be much easier for mutual associations compared to high street banks.

First, because mutual associations are local organisations for the local people, community members are likely to take better care of the savings. In most cases, management of the associations is local and, therefore, has a very good knowledge of the character of potential borrowers. Unlike the bank, which assesses the credit reputation based on the person's credit history, the potential borrower should be well known to the association, and so a credible character reference is guaranteed. Moreover, the community acts as a watchdog so that no borrower would like to be known in the community as failing to repay a loan.

With respect to the assessment of financial capacity of potential borrowers, association managers are clearly aware of the economic activities of the potential borrowers because they are local people. Thus, the problem of income verification is minimised. Also, they can assess the ability to pay by considering both the formal and informal incomes of the borrower. Income from extended

family members in a household could be included as part of the family income, thus increasing the amount the household qualifies to borrow. These opportunities are usually not often available to borrowers when high street lenders evaluate the loan.

Ghanaians, naturally have the spirit of self-help initiative. Therefore, mutual associations can capitalise on this community initiative to develop programs that incorporate self-help activities where borrowers can contribute their own labour towards house building. In so doing, debt-to-income ratio and, therefore, the loan required will be such that the borrower would be able to afford to buy, even with the low income. As discussed earlier "freehold tenure" in Ghana is not common because of communal land ownership. The current legislation is also not clear about how long it will take to foreclose on defaulted property even if it were possible to do so. This makes collateral risk complicated for banks, but where mutual institutions offer loans to local people to acquire houses built on communal land, there may be alternative ways to ensure collateral security. For example, if activities of mutual associations are undertaken with the full participation and agreement of local communities and their leaders being custodians of the land, they could effectively negotiate funding and collateral terms with associations. The parties could agree on some form of share equity/ownership. The mutual association would make funds available to qualified members to build houses on the portion of community land (to which members of the community are entitled anyway) in return for partial ownership and/or to share equity on the property. In that way, mutual associations would not have to worry about the lack of freehold tenure where land is community held, as the house is effectively owned by the member and the association until the loan is paid up. In that case, the community does not guarantee the loan to the institution, but the association is part owner and equity shareholder of the property. The property itself becomes the first collateral security for the loan to the extent that in the event of repayment default, the property could be taken over by the association. Moreover, because both owners and the community participate in the building process, they would be able to undertake adequate checks to ensure that unsuitable work is not done. Hence, the value underlying mortgage security for the lender is maintained. Also, the community could make land available to the association and then, through self-help programs, houses may be completed for beneficiaries. Habitat for Humanity in Ghana successfully developed similar programs that helped to provide affordable houses for certain low and moderate-income households in the early 1990s. However, follow-up on this initiative did not happen, probably because of the lack of government support.

In addition to personal savings contributed by potential borrowers into mutual association programs, they can contribute their own labour, especially into self-help programs developed by the

association, which can be regarded as capital investment in the property. In this case, the loan-to-value ratio may not be large, and therefore monthly loan payments could be affordable.

Finally, the risk associated with the state of the economy could be left for the government to deal with because it has the powers and instruments to implement appropriate policies and also support mutual associations and could make a significant contribution in the quest for sustainable homeownership for key workers in Ghana as they are meant to be self-sustaining economic organisations. The credit policies of mutual associations would be sound as they are based on the commitment of the local community geographically close to the association and thus known to its management. It must be noted that events may not be as easy in practice as described above. In any case, a number of variations on the theme may need to be considered if success is to be achieved.

a) New Institutions Created

In the following decades, secondary mortgage institutions like Fannie Mae and Freddie Mac stepped in to mobilise new sources of conventional mortgage funding, chiefly through securitisation. The mortgage-backed security was developed and fundamentally changed the course of housing finance by linking mortgage finance directly to capital markets. Functioning as pass-throughs, mortgage-backed securities proved to be a remarkably effective way to provide liquidity while minimising interest-rate risk to the mortgage lender and the secondary market (Ansah, 1996).

In the 1980s higher and more volatile interest rates presented a different set of challenges to the U.S. housing finance system's ability to keep affordable mortgage funds flowing. Despite the gains from securitisation, funds continued to flow out of savings and loans as investors sought higher yielding investments. At the same time, these savings and loans experienced an interest-rate squeeze between the relatively low yields of their mortgage portfolios and the substantially higher yields they had to pay for large deposits (Ansah, 1996). As a result, this second interest-rate squeeze in two decades placed a premium on a mortgage lender's ability to sell far more mortgages – many of which were by then under water (below market) – to the secondary market and other investors, and to better match their assets and liabilities. In short, the economic environment spurred the industry, including savings and loans, to adopt new mortgage banking practices (Ansah, 1996).

b) Housing Finance Problems in Ghana

The problems of housing finance in Africa, many of which are unique to the continent, are even more spectacular. Most of our countries have since the early 1980s been in a state of prolonged economic, social and political difficulty (Ansah, 1996). There have been wars, domestic problems and unfavourable climatic conditions. In addition, external shocks, such as declines in commodity prices,

unfair trade cartels, abrupt drops in external resource flows, high inflation and steep increases in interest rates, have led to a rapid decline in incomes and economic growth. This has resulted in high poverty levels and adverse housing conditions (Ansah, 1996).

Ghana shares these problems, but it is managing the situation systematically. Habitat I called for greater integrated planning and provision of shelter, infrastructure and services. Under the Ghana Government's Urban I, II and III projects all these issues are being addressed. It is under the Urban II program that the Home Finance Company (HFC) was created in May 1990 to implement and manage a pilot housing program that is not subsidised and which is attempting to create a secondary market while at the same time reviving housing finance in the country (Ansah, 1996).

The banking system in Ghana did not escape the economic decline and political instability of the 1970s and 1980s. A general lack of confidence in the banking system by the public, the banks' inability to engage in venture capital, high default rates, widespread fraudulent practices and lack of expertise to properly appraise projects were some of the problems facing the banking system (Hanson, 1999). A few banks in Ghana offer mortgages to High Net Worth customers. The First Ghana Building Society (FGBS) has so far been unable to provide mortgage financing on a sustained basis. Home Finance Company Limited (HFC) has turned out to be the dominant housing finance institution in Ghana, providing a wide range of mortgage financing on a sustained basis to a broad spectrum of customers.

c) Problems and their solutions

According to Ansah the following solutions to problems with the pilot program were identified:

i. **The price indexation concept** has been reviewed due to an unexpectedly high environment of inflation. Following the election in 1992 and payment by the government of salaries not budgeted for (under pressure of unions and other staff groups); the negative effect of introducing VAT at a high level of 17% and then withdrawing it under political pressure; and bad harvests in 1994 and 1995, inflation took a sharp upward turn in 1995. From the previous position where adjustment to the inflation-indexed mortgages resulted in interest rates which were at least 8% to 9% below bank lending rates, 1995 was characterised by inflation in excess of 60%, whereas bank lending rates hovered around 40%. To avoid a severe credit shock that would have affected borrowers repayments of loans, an agreement was reached between HFC and its bondholders to provide a "cap and floor" on the interest rate charged to the company's pilot scheme portfolio. An adjustable ceiling of 2% below the average lending rates of three major banks operating in the country has been adopted and will continue until the economic

situation improves. Currently the "cap" is 38%. The relationship between the mortgage rate and other rates is as follows:

- 91-day Treasury bill rate: 45%
- 1-year Treasury bond rate: 39.45%
- 2-year Treasury bond rate: 45%

There is no fixed "floor", but in accordance with the agreement with the bondholders, they will recover any "losses" later when the economy stabilises.

ii. ***The primary market*** has been slow to respond to the opportunity of refinancing under an emerging secondary market. The banks have continued, despite incentives, to be unwilling to lend for construction financing and to originate mortgages for sale to HFC. Investment in Government Treasury bills provides the easiest way out for most banks, which are also required to maintain high levels of investment in Treasury bills as part of measures by the central bank to reduce liquidity in the system. The banks also have been slow in developing individual (consumer) banking relationships because of high personnel and other transaction costs, making it less profitable than the readily available corporate business. HFC, therefore, has had to rely heavily on its non-bank Originating and Servicing Institutions (OSIs) such as the State Insurance Corporation of Ghana (SIC), who have the incentive to originate and sell mortgages to HFC. At least two private sector mortgage companies have been formed recently and have applied for licenses under the Financial Institutions (Non-banking) Law 1993. They are expected to undertake mortgage origination and servicing for HFC.

iii. ***Clarification of policy issues.*** The central bank is soon expected to issue clear guidelines on HFCs apex secondary mortgage status. The risk weighting of mortgages, however, has been reduced from 100% to 50%, in line with the international convention which provides a good incentive for increased mortgage lending activity. HFC has prepared guidelines for its proposed secondary mortgage lending activity. These are to be refined under proposed "twinning" arrangements with a Malaysian mortgage financing company to provide practical assistance in developing the secondary mortgage system in Ghana. The Malaysian secondary mortgage system seems to be the most relevant model for HFC to follow.

iv. ***Inadequate supply of houses.*** This continues to be a problem inhibiting the development of a secondary market. Under the auspices of the Minister of Works and Housing, the Ghana Real Estate Developers Association (GREDA) was formed about the same time as HFC and is comprised mainly of private companies. GREDA is now a self-regulatory body which has just

acquired vast acres of land around the suburbs of Accra. Infrastructure is being pre-financed by SSNIT. HFC has to look into complaints by developers of inadequate construction financing.

v. ***Prevailing high interest rates.*** Prevailing high rates, particularly of Treasury bills, make it difficult to mobilise appropriate housing. A draft policy statement by the government to address this issue is being considered. The mortgage down payment required of low-income borrowers is 10%, as compared to 20% or 30% for other categories of borrowers.

vi. ***Construction financing is inadequate.*** HFC is taking steps to address this problem through two major local banks. Furthermore, additional funds are being raised by HFC through the HFC-REIT to augment the funds available for construction financing, an absolute requirement for a thriving housing industry.

vii. ***Land title and registration procedures are still inordinately slow.*** Another component of the Urban II project is tackling this issue and aims to remove the bottlenecks in this system and merge the authorities of the Land Title Registry with the Lands Commission Registry.

viii. ***Inadequacy of serviced lands on which adequate infrastructure is provided.*** This is being undertaken by site and service schemes commissioned by Tema-Development Corporation (TDC), one of the largest parastatals, and Social Security and National Insurance Trust (SSNIT), the largest fund available for long-term investment in Ghana. These schemes are being provided on a full cost-recovery and profit orientated basis.

ix. ***Low-income earners and rural housing are not provided for under the present HFC program.*** The government's draft low-income housing policy document, however, is looking at ways to facilitate mobilisation of appropriately priced funds for extending a housing finance scheme to these sectors.

x. ***The informal sector accounts for over half the supply in the country.*** Many borrowers in this sector are still outside the tax and social security network and lack basic accounting know-how to enable financial institutions to assess income for the extension of credit on a long-term basis. HFC is tackling this sector with the assistance of HDFC of India and the Grameen bank of Bangladesh.

xi. ***Low and moderate-income levels continue to constrain the ability to pay for realistic loan amounts that would finance appropriate urban housing for the majority.*** Through the implementation of a graduated payment method under the pilot housing scheme, HFC has been able to make homeowners of persons in regular employment with an average monthly "take-home" pay of GHS280, 000 which is approximately US$186. By recognising other household incomes and providing the facility for joint application by spouses, siblings and parent/child, it has been possible to extend the net wider. The requirement of a down payment of 20% has

provided the opportunity to mobilise household funds through the medium of the HFC Unit Trust and the company's deposit scheme, in respect of which realistic interest rates are paid by HFC.

xii. ***High cost of houses.*** Efforts are continuing to address the high cost of houses, as a means of further reducing the affordability threshold. This is being done through the core house concept, which includes terraced houses. The use of alternative construction technologies is also being encouraged. More intensive use of land has resulted in infrastructure costs being spread over a larger number of homeowners, thus reducing the impact on house prices. The company sets aside yearly funding from profits to promote efforts in this respect.

Diversification into mortgage schemes for high net worth individuals, corporate bodies and the non-resident Ghanaian population has provided a better balance of profitability and sustenance of the new system.

A total of approximately 1,800 new homes have been funded by HFC between January 1992 and March 1996. The opportunity has also been provided for two major parastatals to sell off unprofitable rental accommodation provided in the past to many employees and others who were paying less than an economic rent. This policy is meeting with some resistance but seems to be working (Ansah, 1996).

Through the government's pragmatic policies on housing finance, fresh foreign investment recently has come into the country, but the housing deficit remains rather daunting, as the backlog of at least 300,000 is growing at 50,000 every year.

d) The Home Finance Company

Incorporated initially as a private limited liability company, Home Finance Company's (HFCs) mandate was to promote a two-tiered, sustainable housing finance system in Ghana and to address major barriers such as:

- High inflation;
- High variable rates of interest;
- Declining real incomes;
- Absence of a long-term household repayment of loans culture; and
- Weak foreclosure laws.

HFC was originally conceived to operate as a secondary mortgage institution providing sustained housing finance in a two-tier housing system. A two-tier mortgage financing system in Ghana was based on the following assumptions: that there would be strong Central Government support for

HFC given the acute housing shortage; that the creation of HFC as a secondary mortgage institution would be the catalyst to jump start primary mortgage lending by banks after their restructuring.

The newly restructured banking system would be insulated from significant risk through an arrangement whereby the primary institution would bear only 10% default risk, with Government bearing the remaining 90%. HFC was thus to bear no default risk. The operation of the mortgage market has turned out differently as only one primary institution has been active in the market. Financial institutions supposed to operate in the primary market do not consider the commission of 1.5% per annum attractive enough (Ansah, 1996). This is in spite of the fact that they would not invest their own funds and bear only 10% default risk. Most households in Ghana use their own savings, sweat equity, barter arrangements and remittances to build their houses. The commercial financial institutions provide very little support to low and moderate-income households in the form of mortgages. Where it has done so, it has favoured the owner occupied and new dwellings and offers very limited support to the rental and incremental housing development.

The traditional mortgage lender is limited in its ability to serve low and moderate-income households. The payment-income ratio is too high. Transaction costs in lending to this market are usually high and small loans are unprofitable and riskier for a commercial lender. Ferguson (1999) notes that the incremental building process is the only building strategy that works for low and moderate-income households. In Ghana, the incremental building process is used widely. Empirical evidence from the micro-finance institutions around the developing world supports the argument that shorter loans are better for the poor. Mortgage loans are usually for longer terms of up to twenty years.

Under the pilot housing finance program, it was proposed to establish a housing finance system indexed to inflation, based on Consumer Price Index (CPI) figures. Under this price indexation formula, both mortgages and bonds are adjusted monthly on the basis of the three-month average change in the CPI.

HFC functions as a second tier lender, extending loans to qualifying borrowers through approved originating and servicing institutions (OSIs). As stated in the project and other documents of the pilot scheme, the mortgage default risk is shared on a 90% HFC and 10% OSI basis. The mortgages are on HFCs balance sheet. Currently OSIs view themselves as purely originators (or "post office boxes") (Ansah, 1996).

e) Special Mortgage Terms

The mortgages made by HFC are a variant of the dual index formula (Barry et. al. and Lea, *Housing Finance International*, 1995). Mortgage repayments are fixed at 35% of the verifiable income of the borrower (Ansah, 1996). This is paid by employers through payroll deductions. As the borrower's income rises, repayments also are expected to increase proportionally. From experience, borrowers prefer declining loan balances and are often prepared to pay up to 50% of their income towards homeownership (Ansah, 1996).

The interest rate on the mortgages is fixed at 1% real rate. The term is initially 20 years. If real wages increase by more than 1% per year, the loan will amortise in less than 20 years. If real wages do not increase by 1% per year, the loan will take more than 20 years to pay off (Ansah, 1996).

Initial plans were for HFC to finance about 2,000 new, private-sector-built one-, two- and three-room units. Houses were to be designed, marketed and built by private developers operating on the basis of commercial criteria. Construction financing was to be provided by the banks that were also to originate mortgages for sale to HFC.

f) HFC Structure and Ownership

HFC initially was a shell company, with very little stated capital, owned on an equal basis by the Government of Ghana (GOG), Social Security and National Insurance Trust (SSNIT) and Merchant Bank (Ghana) Limited (MBG). The shareholding was subsequently broadened to include three large insurance companies, namely State Insurance Corporations (SIC), Ghana Union Assurance (GUA) and Vanguard Assurance. Two of these companies are private. SIC is the largest corporation engaged in life and hazard insurance, now state-owned, but about to be divested. HFC opened up 25% of its shareholding to public subscription on the Ghana Stock Exchange (GSE) in 1995. This offer was over-subscribed by 15%, the first over-subscription on the GSE. The company is now owned by 300 shareholders with 12 institutions controlling over 98% of the capital. (See Figure 2.3 below)

Shareholding Structure
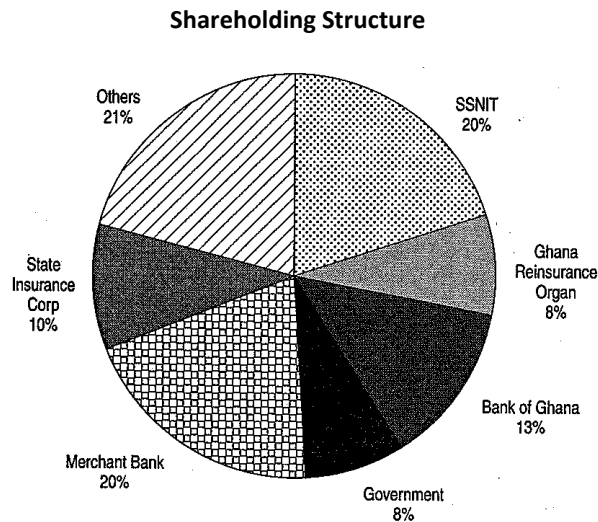
Figure 2.5: Shareholding Structure
Source: Housing Finance International (1996)

g) HFC Objectives

The objectives of HFC include, among other things:

i.   The overall program development and management of a new building housing finance system, which involves indexation and securitisation of mortgages.

ii. The creation of a two-tiered financial system whereby mortgages are originated and serviced at the primary level by Originating and Servicing Institutions (OSIs), (banks and other primary mortgage lenders); and at a secondary level, funds are managed and made available by HFC to approved OSIs for relending to mortgagors under certain clearly defined limits.

iii. Mobilisation of funds from various sources, including:

- Issuance of long-term bonds of various maturities to SSNIT and other institutional investors.

- Issuance of long-term bonds to the Government of Ghana and/or Bank of Ghana under the special pilot housing finance scheme, financed through an International Development Association (IDA) development credit extended through the Government of Ghana to HFC under the Urban II project.

- The bonds are 30 years in maturity and will be repaid periodically through the repayments of principal on the mortgages. The bonds purchased by SSNIT and other institutional investors receive repayments prior to the bonds purchased by the government.

According to Ansah the total funding available under the pilot scheme was US$25.5 million, including the IDA portion of 40 years. By adopting price indexation, the company had been able to access

funds amounting to US$16.5 million from the country's main pension fund, SSNIT, which previously (like other institutions) was reluctant to invest in long-term instruments. HFC has raised and continues to rise on its own additional funds as follows:

i.   Through the medium of the country's first licensed collective investment scheme, the HFC Unit Trust established in 1991, the equivalent of US$4.2 million owned by approximately 2,000 individuals and staff provident finds.

ii. Through the medium of the HFC Real Estate Investment Trust (REIT), also the first of its kind in Ghana, since December 1995, almost US$1 million equivalent was raised for investment in housing and related real estate projects such as shopping centres and cluster housing development. Under a pilot program. REITs first cluster housing development, comprising 14 three- and four-bedroom houses has been recently commissioned.

   ▪ Through, the first public sale of housing bonds it is expected to raise an initial sum of US$2 million to refinance a mortgage portfolio that benefits foreign exchange-earning Ghanaians. Local currency (Cedi) denominated bonds also will be sold.

   ▪ Through its capital and deposits, another US$5 million will be raised as of March 31, 1996.

The HFC-Unit Trust and the HFC-REIT are both open-ended tax exempt funds. Recent marketing efforts have targeted the corporate as well as the so-called informal sectors. The company is managed by three executive directors and a total staff of 41, mostly professionals. HFC has since its inception been managed entirely as a private commercial concern under the authority of its board of directors, comprised of experienced bankers and other professionals.

As part of the Urban II program, the government established the Housing Finance Institutional Reform Committee (HFIC) under the chairmanship of the Governor of the Bank of Ghana, to co-ordinate the relevant ministerial activities to provide HFC with the needed public sector support and enabling environment. HFIC has been of immense help to HFC in its development.

Furthermore, the Home Finance Mortgage Law 1993 (PNDCL 331) was promulgated to reform foreclosure remedies available to HFC without the need to go to court, unless more than a certain percentage of the loan had already been paid by the borrower. Under this congenial regulatory environment, HFCs repayment record has been in excess of 98%, thus generating additional funds for mortgage lending; the company has since its inception been entirely self-supporting.

2.3 Housing Market

Housing markets offer a tale of encouraging growth. There is, however, a major challenge of affordability. Affordability and access is reduced by the prohibitive costs of borrowing, the risks of foreign currency loans in volatile economies, and an unrealistic focus on the mortgage instrument. Often, people simply cannot access financial services. Challenges are being addressed on many fronts. The lack of long-term finance is a major constraint. Local capital markets are providing part of the solution, but only in some countries.

In view of the economic circumstances, the International Finance Corporation (IFC) proposed a three year program in 2006 to 2009, to tackle some of the outstanding housing finance issues in Ghana. IFC committed US$25 million as lines of credit to three out of the five participatory Financial Institutions to jump start the mortgage market in Ghana. As a demonstrative effect, two banks, Guaranty Trust (GT) Bank and Amalgamated Bank, had indicated their interest in participating in the program.

The program was unique in design as it coupled systemic legal and regulatory reform with key investments in mortgage origination and construction finance. The program is aimed at reducing the implied risks in mortgage financing. By providing support to a mortgage law reform to be adopted by the GoG, time wasting and delays to the foreclosure on defaulted borrowers should be reduced substantially from five years down to 12 months. By standardising the mortgage products through a Mortgage Toolkit, which provides guidance on how to establish modern mortgage lending operations, with many financial institutions, the investment climate of local and international lenders will improve. This would allow a reduction of interest rates, since the implied risks related to mortgage financing would be reduced by a better legal environment, better underwriting procedures and most of all a rising confidence that a mortgage is worthy in the sense of being a good marketable security.

The World Bank Group worked with the Government of Ghana to create the Home Finance Company. HFC was initiated with the vision to become a secondary market company. Banks such as Barclays, Standard Chartered and Ghana Commercial Bank, amongst others, would originate and sell their mortgages to HFC.

Unfortunately, the market did not develop in this way. The banks did not enter the mortgage lending business due to high interest rates, a lack of bankable properties and alternative lending opportunities. In order to stay competitive, HFC became a primary mortgage issuer and was the only

significant mortgage lender in the housing market for more than a decade until the Ghana Primary Mortgage Market Initiative (GPMMI) was launched.

Following the program launch in November 2006, the housing market in Ghana had evolved with the GPMMI working with five financial institutions namely Ecobank, Merchant Bank, Fidelity Bank, HFC Bank and Ghana Home Loans.

In the United States, where the secondary mortgage market first emerged following the Great Depression, the housing finance system was built on a foundation in which depositors could confidently invest their money in federally insured savings and loan institutions, then the dominant source of mortgage lending. These institutions, in return, could offer home buyers longer term, amortising mortgage credit at reasonable rates.

Whether intentionally or not, this emerging new system of housing finance was highly dependent on an economy with only minor changes in interest rates. To profitably provide a continuous flow of mortgage funds, savings and loan institutions needed interest-rate stability to fund long-term mortgages with short-term deposits. For about three decades, the process worked extremely well.

During the 1960s the United States (U.S.) faced severe regional capital shortages, as newer regions had more demand for mortgage credit than the regional savings available could reliably mobilise. At the time, savings and loans experienced debilitating competition as depositors sought other higher yield investments. As a result, wide differences in mortgage rates appeared.

2.3.1 The Ghana Primary Mortgage Market Initiative (GPMMI) Program

IFC have established a three year Advisory Services (AS) program known as the "Ghana Primary Mortgage Market Initiative (GPMMI)" to foster the large scale opening of the primary mortgage market in Ghana. The program is funded by the Swiss Secretariat for Economic Affairs (SECO). Alongside the advisory services, IFC is providing lines of credit in local currency directly to participating banks of the Program.

The adoption of a market-oriented mortgage system was to assist in improving the lives of many families who live in unsafe, substandard, or severely cramped housing conditions. Additionally, the creation of an active and organised residential mortgage market would stimulate the growth of several supporting industries including construction, building materials, architecture and design and real estate agencies. Many downstream industries, such as small and medium sized enterprises (SMEs) in furniture making, would benefit from the expansion of housing markets.

The Program was established with a three-pronged approach:
- Improving supportive processes. This involves working with institutions such as the Land Title Registry through its Land Administration Program being supported by the World Bank

to ensure efficient registration processes. The program will also work with supporting institutions, such as appraisal firms to ensure standardisation in the appraisal methods, and real estate builders and agents to build a data base of real estate listings to create a strong mortgage market.

▪ Working with government officials to improve the legal, tax and regulatory framework for mortgage finance. The component includes work with legal consultants on foreclosure and eviction rules, mortgage provisioning rules, promotion of a secondary mortgage market, and incentives in the tax code to promote home ownership.

▪ Working with financial institutions to develop and launch mortgage products. The program, through its advisory services, will provide capacity building programs to lenders to enhance their mortgage lending skills and create and develop innovative mortgage products and services.

2.3.2 The Importance of Housing Finance

The development of housing finance is inextricably linked to overall country-wide economic development, including the strengthening of financial institutions, reducing poverty, promoting social stability, and improving people's lives. The housing finance market is amongst the most important sectors in an economy because it accounts for a sizeable portion of a country's productive activity, through backward linkages to land markets, building materials or tools, durable goods, non-durable goods in terms of home furnishings, and labour markets.

Housing markets have significant forward linkages with financial markets. Mortgage debt accounts for a large proportion of household debt and, through secondary markets and alternative sources of finance; mortgage debt supports the efficient functioning of domestic and international financial markets.

Housing is often viewed as a leading indicator of overall macro-economic activity. Therefore, the development of the housing sector would have a tremendous development impact, both in terms of providing social stability and promoting economic growth in Ghana and, by extension, to other countries in the region.

2.3.3 Expected Long-Term Impact of the GPMMI Program

The Program was expected to help address and overcome many of the key obstacles to primary mortgage market development in Ghana and also deliver the following long-term benefits:

▪ Create long-term high quality mortgage lending operations at a number of banking firms;

- Foster the offering of local currency denominated mortgage loans, thus eliminating foreign exchange risk for both lenders and homeowners;

- Foster the development of affordable housing by making mortgage financing available to all. As a result, developers and builders will be more willing to design and build large scale and high quality housing projects knowing that there will be a final takeout of the completed home;

- Foster the development of competitive forces operating in an open and unfettered market place;

- Introduce risk-mitigating vehicles and tools for the banking system and for the investing community of institutions in Ghana;

- Introduce a securitisation model, in a basic format, as an efficient and cost effective way to bring long-term funds to the banking system and as a way for the banking system to manage and off-load credit risks that can be efficiently priced and aborted by the capital markets. There is no indication that the sub-prime crisis in the USA affected the perception of mortgage lending in Ghana. The market is not developed to enter into sub-prime lending. Investors are willing to invest in mortgage bonds but the market is still in its infancy stage.

2.3.4 Development Impacts of the GPMMI Program

"A market oriented mortgage system can assist improve the lives of the many families who live in unsafe, sub-standard, or severely cramped housing conditions." (IFC, n.d.)

The initiative was expected to achieve the following long term benefits for potential partners, credit bureaus, real estate developers and the general public. These are:

a) Macro-economic Aspects

The housing market of any country is the single most powerful engine for economic growth and productivity due to the significant multiplier effects of investment in housing. Housing finance mechanisms are key drivers of the housing industry. In the absence of housing finance mechanisms, homeowners are left to their own means to buy their own homes, and the market does not develop. This severely limits the level of home ownership to the few wealthy individuals without enhancing the great majority.

The higher multiplier effects of housing activity stem from the wide variety of inputs to residential construction. To name only a few, they range from such high-level professional jobs such as engineering, architecture, and urban planning, to skilled labour jobs such as electricians, plumbers, and masons, to semi-skilled and unskilled labour. Many different classes of work are involved both in

the production of the hard asset – the home, and in the production of the financing which allows families to actually own or rent a suitable living space.

Many direct and indirect industries feed the production process. These range from all types of construction materials (cement, brick block, wall board, plaster, wood), to manufactured products (windows, heating and cooling devices, electrical and plumbing fixtures, cabinetry, ceramic tile), and furnishings (carpets, window coverings, furniture, and dishes). The list goes on and on.

b) Social Aspects

The provision of clean and safe housing is the primary responsibility of national governments. Many countries take this role seriously and view home ownership as a right. Some go to the extremes of providing subsidy systems, ensuring abolition of foreclosure, and eviction. It is positive when governments take this responsibility so seriously. However, extreme measures could distort market mechanisms and stop market-based financing from flourishing.

This program encourages open and free market forces and demonstrates to government policy makers that subsidies are not the only way to bring the cost of home ownership within reach of lower income strata. Furthermore, it demonstrates that the extension of home ownership benefits is only possible when the contractual obligations of the mortgage agreement are fairly enforced through the ultimate use of foreclosure and eviction.

c) Pride of Ownership

Most people want to own their homes. When they can, they fight hard to pay their mortgages in order to keep their homes and lavish significant amounts of disposable income to maintain and beautify their homes. A high level of home ownership has an important impact on the national psyche and imparts a general feeling of well-being.

d) Store of Wealth

A family's home typically becomes the single largest store of family wealth. This is increasingly true as you move down the economic ladder. When mortgage debt has been reduced or paid off, this wealth can be tapped for later stage family needs, including retirement.

2.4 Financial Liberalisation and Intermediation

Financial systems play an important role in economic development. The financial sector forms an important link between a country's macro-economic policy and the rest of the economy. Its basic role in development is resource mobilisation and allocation among productive sectors through financial intermediation, a large scale specialised function performed by specialised financial institutions and their agents.

Prior to financial liberalisation, the financial sector was characterised by financial repression which, coupled with a balance of payment deficit, overvalued exchange rate, inflationary pressure, and macroeconomic disequilibrium, almost led to the collapse of the country's financial system. Negative real interest rates and a budget deficit rose in 1981 to 6.5% as a percentage of GDP (Soyibo, 1994).

The existing bank law did not provide sound prudential and regulatory guidelines for the banking system. Laws governing the operations of the non-bank financial institutions and some informal operators were not formalised. As was the case in Nigeria, interest rates were administratively determined and credit ceilings were also imposed. Maximum and minimum deposit and lending rates were imposed. No appropriate safety nets were established to safeguard against liquidity crises and no adequate regulatory and monitory framework was put in place to prevent collusion and excessive risk-taking. This left very little encouragement for borrowers seeking finance to buy, finance or build their properties, let alone the unbankable market that also sought finance as a source for housing.

When the introduction of financial sector reform began in 1983, several drastic liberalisation measures were undertaken. The Banking Law was amended to provide sound prudential and regulatory guidelines for the banking system similar to those adopted in Nigeria and other African countries. Areas covered by the amendment included specifications for minimum capital base, limits to risk exposure and improved accounting, auditing and financial reporting standards.

A securities industry law was enacted to support Ghana's emerging capital market. A non-bank financial institutions law was promulgated to formalise the activities of some informed operators. Ghana liberalised its financial system by removing policy induced-distortions to enhance competitive banking practices, improve resource mobilisation, and increase the quantity and quality of investments offered to borrowers at market rates than had hitherto been the case. However, banking has become rather urbanised and elitist resulting in the serious marginalisation of borrowers from the credit market.

From 1985, the Bank of Ghana (BOG) started a phased withdrawal of administered interest rates and credit ceilings. Sectoral lending requirements were abolished and by March 1989, commercial banks were allowed to determine their own interest rates. Maximum and minimum deposits on lending rates were replaced with discounted rates as the main instrument to influence the overall level of interest rates. To improve liquidity management, treasury bills and bonds were introduced by the BOG in 1990 for trading through open market operations which were fully operational in 1992 (Mkandawire and Soludo, 1999). Hence, financial reforms would have to go beyond liberalisation if finance was to be productive.

Financial intermediation is a pervasive feature of all of the world's economies. It provides the means by which funds are mobilised from within and outside an economy and reallocated to productive sectors (Gatsi 2010). This initiative further encourages the sustainable development of a liberalised finance system in Ghana. They attract funds from savers in the surplus sector and channel these to borrowers for purposes of profitable investment. A repressed financial system fragments the domestic capital market with adverse effects on the quality and quantity of real capital accumulation (Mkandawire and Soludo, 1999).

Financial intermediaries such as banks, insurance companies, moneylenders, susu groups and collectors, microfinance institutions, Rotating Savings and Credit Associations (ROSCAs), friends and family who are local residents and those living abroad help to deepen the intermediation process (Gatsi 2010). The level of economic activities, foreign direct investment inflows, and the savings culture of citizens and in some cases the religious beliefs of the people can influence the financial intermediation process significantly. According to Gatsi (2010), Gini and Herfindahl indices have shown a downward trend, indicative of improved competition in the Ghanaian banking industry, hence deepening the financial intermediation process. Ghana's enhanced monetary and fiscal policies as well as the general improvement in economic activities and increased credit to the private sector are signs of a more progressive financial intermediation process in Ghana.

2.5 Financial Market Development and Capital Market Investment

One of the most concise assessments of the conditions necessary for financial market development around housing finance is by Hassler (2005). At a BNA Housing Finance Workshop on Developing Housing Finance, on behalf of the World Bank, he set out his views.

He, along with numerous others writing on the subject, are of the view that there are a number of requirements that SSA countries must embrace if they are going to move forward in terms of delivering housing finance, including promoting:

a) *Stable macroeconomic conditions*

- stabilising the macroeconomic climate which promotes confidence in the value of a country's money; and
- lowering interest rates

b) *A legal framework for property rights*

- developing sound property rights, including the need for a clearly defined right to sell land;
- developing clear procedures for regularising informal tenure;
- developing property development law (e.g. condominium law) and developer finance; and

- developing judicial processes to litigate and resolve disputes

c) A property market

- establishing an efficient housing supply chain which focuses on removing obstacles to the release of land by government; providing infrastructure; and clearing construction bottlenecks

d) Mortgage market infrastructure

- developing title and collateral registration systems; enforcing rights; encouraging formal tenure; minimising corruption;
- developing flexible underwriting approaches with respect to assessing incomes;
- developing foreclosure procedures which will ensure lender's security, including out-of-court processes;
- developing risk assessment and management tools, borrower credit information, income verification; and
- developing adequate payment systems, for example, payroll deduction

e) Funding sources to promote financial intermediation

- encouraging savings mobilisation in order to fund lending via bank deposits
- encouraging primary market development (as a first choice), which requires:
- simple mortgage-backed debt instruments; mortgage quality standardisation; mortgage laws;
- financial risk management, for example: not using fixed interest rates, developing liquidity management tools, accessing capital markets when necessary; and
- increased competition amongst lenders
- encouraging capital market funding (as a second choice) by using capital market instruments, for example: securitisation, government pension funds and;
- avoiding state lending due to it being costly, inefficient and prone to low recovery.

A stable macro-economic condition as depicted currently in Ghana and discussed above by Hassler (2005) is paramount to a sustainable and vibrant housing finance market in any economy. Until 2006, Ghana had only one significant mortgage lender. However, due to the fairly stable macro-economic conditions, Ghana now has three banks actively participating in mortgage lending and another two intending to start mortgage lending in the near future. The government's commitment to the delivery of housing cannot be underestimated in a sustainable housing finance market. The legal and regulatory framework must be favourable for the housing market. The awareness about

the introduction of the new foreclosure law has brought some confidence and comfort to lenders to offer mortgages.

This Program as discussed in the literature review has so far proven successful and has started promoting broad-based and market-oriented investments. The direct beneficiaries are a wide variety of firms (banking, investment companies and construction companies), and ultimately individual homeowners.

2.6 Conclusion

The literature reviewed clearly illustrates the concepts and framework that is evident in the Ghanaian housing and financial markets. Housing finance is essential for urban shelter development and is often a key element of housing financial markets modernisation. It has been seen as promoting housing production and increasing income of LMI groups. However, access to housing finance is limited to high and middle income earners mainly engage in self finance or take advantage of the few mortgage facilities available. This is beyond the reach of the majority of the population who are outside these income brackets.

The rate of obtaining loans from the formal financial institutions in the developing countries by LMI borrowers is low due to complicated and lengthy procedures that overwhelm the poor and uneducated LMI-borrowers. In other cases, credit problems which have restricted them from borrowing include capital and collateral specific requirements, lack of participation in planning for housing credit programmes, lack of, or inadequate, financial institutions who catered for LMI specific needs to loans, and late release of loans which led them to borrow from the informal sources.

Determining the problems and the financing needs of LMI groups are important in designing appropriate mortgage systems for them. The design of mortgage products should be based on clients' demands and needs. Designing appropriate housing financial systems for LMI groups is an adequate financing strategy.

A thorough understanding of the perceptions of LMI earners' access to loan facilities and preferences will assist policy makers to make better decisions in designing appropriate mortgage systems for LMI groups. There is, however, limited information to enable understanding of the LMI perceptions and preferences regarding access to housing finance. This gap in the literature prompted this research and gave guidance to the formulated research questions discussed in chapter 1.

As it has been discussed in the literature review and background in Ghana, achieving a greater impact of housing finance for LMIs requires skillful risk management techniques and collaboration between the various stakeholders in the land and housing delivery systems. The need to contextualise international experiences of housing finance programmes into local circumstances has also been emphasised. The next chapter therefore contextualises the literature review in conjunction with local circumstances by means of a mixed research method technique to describe the research methods employed and why they were employed. Operations definitions, unit of analysis, variables and indicators are discussed.

3. RESEARCH DESIGN

"Don't try to drive the homeless into places we find suitable. Help them survive in places they find suitable." Daniel Quinn

3.1 Introduction

The preceding chapters have discussed some understanding of the research context particularly on housing finance supply to LMI groups. The purpose of this methodological study is to provide a primer for conducting a mixed analysis research. This involves using both quantitative and qualitative data analysis within the same study. This chapter forms the foundation of the research of the study undertaken. It will seek to find solutions to perceptions and preferences formulated by LMI groups with housing finance instead of driving them into places we find suitable for them as the quote above by Daniel Quinn so aptly suggests. In particular, a heuristic example using real data from a published study entitled *"Perceptions of Barriers to Reading Empirical Literature: A Mixed Analysis"* (Benge, Onwuegbuzie, Burgess and Mallette, 2010) is used with the aid of screenshots to illustrate how the researcher will conduct a quantitative dominant mixed analysis, wherein the quantitative analysis component is given higher priority and qualitative data analysis is incorporated to increase understanding of the underlying phenomenon.

Based on the literature review findings and information elicited, research questions were posed which this dissertation rests. The discussions in this chapter is organised around the following areas: the Accra Metropolis as a case study area, research approach, research methodology adopted for this study to satisfy the research objectives as stated in chapter one, research design, operationalising, bringing the survey instruments into context and data analysis.

3.2 Research Design

The conceptual framework deduced from the literature review is that of investigating the possibilities of improvement to access finance by LMI earners, which calls for a combined effort of all stakeholders at various levels for effective programmes and interventions to achieve sustainable settlements for the vulnerable LMI groups. The study is conducted in a typical case study area like Accra where a mixed methods research design approach is adopted to draw characteristic conclusions from the chosen LMI sample population.

The research comprises of "mix[ing] or combin[ing] quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (Johnson and Onwuegbuzie, 2004, p. 17), which is a procedure for collecting, analysing and "mixing" both quantitative and qualitative data at some stage of the research process within a single study, to understand the research problem more completely (Creswell, 2002). The rationale for mixing is that neither quantitative nor

qualitative methods are sufficient by themselves to capture the trends and details of the situation, such as a complex issue as housing finance to LMIs in Accra. When used in combination, quantitative and qualitative methods complement each other and allow for more complete analysis (Green, Caracelli and Graham, 1989, Tashakkori and Teddlie, 1998). In quantitative research, the investigator relies on numerical data (Charles and Mertler, 2002). He uses post positivist claims for developing knowledge, such as cause and effect thinking, reduction to specific variables, hypotheses and questions, use of measurement and observation, and the testing of theories. The researcher isolates variables and causally relates them to determine the magnitude and frequency of relationships. In addition, the researcher determines which variables to investigate and chooses instruments, which will yield highly reliable and valid scores.

Research in common parlance refers to the search for knowledge. One can also define research as a scientific and systematic search of pertinent information on a specific topic for instance this study's topic is:

"An investigation into financing urban shelter development to low and moderate-income earners in Ghana: The case of Accra".

The research design is a framework that informs the procedure undertaken by the researcher for collecting, analysing, interpreting and reporting data in the research study. Rigorous research designs are important because they guide the methods and decisions the researcher will make during the study and set the logic by which interpretations are made at the end of the study (Creswell and Plano Clark 2007). The basic reasoning underpinning the research design is the concept of "Analytical Generalisation" (Yin 1989; Egbu 2007). In analytical generalization, a study is conducted in a typical case study area, and the general conclusions reached are applied to other areas with similar situations.

Alternatively, qualitative research is "an inquiry process of understanding" where the researcher develops a "complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting" (Creswell, 1998, p. 15). In this approach, the researcher makes knowledge claims based on the constructivist (Guba and Lincoln, 1982) or advocacy/participatory (Mertens, 2003), perspectives. In qualitative research, data is collected from those immersed in everyday life of the setting in which the study is framed. Data analysis is based on the values that the LMI groups perceive for their world. Ultimately, it "produces an understanding of the problems based on multiple contextual factors" (Miller, 2002).

In a mixed methods approach, the researcher will build the knowledge on pragmatic grounds (Creswell, 2003; Maxcy, 2003) asserting truth is "what works" (Howe, 1988). The researcher will choose approaches, as well as variables and units of analysis, which are most appropriate for finding an answer to the research questions posed in the study (Tashakkori and Teddlie, 1998). A major tenet of pragmatism is that quantitative and qualitative methods are compatible. Thus, both numerical and text data, collected sequentially or concurrently, can better understand the research problem.

While designing a mixed methods study, three issues need consideration: priority, implementation, and integration (Creswell, Plano Clark, Guttman and Hanson, 2003). Priority refers to which method, either quantitative or qualitative, is given more emphasis in the study. Implementation refers to whether the quantitative and qualitative data collection and analysis comes in sequence or in chronological stages, one following another, or in parallel or concurrently. Integration refers to the phase in the research process where the mixing or connecting of quantitative and qualitative data occurs. This study will use one of the most popular mixed methods designs in educational research: sequential explanatory mixed methods design, consisting of two distinct phases (Creswell, 2002, 2003; Creswell et al., 2003).

In the first phase, the quantitative, numeric, data will be collected first; using a web-based survey called Fluid Surveys and the data will be subjected to a discriminant function analysis. The goal of the quantitative phase will be to identify the potential predictive power of selected variables on the LMI groups and to allow for purposefully selecting informants for the second phase.

In the second phase, a qualitative multiple case study approach will be used to collect text data through individual semi-structured interviews, documents, and elicitation materials to help explain why certain external and internal factors, tested in the first phase, may be significant predictors of the LMI groups not gaining access to finance for housing. The rationale for this approach is that the quantitative data and results provide a general picture of the research problem, for example, what internal and external factors contribute to and/or impeded LMIs' to access finance to housing, while the qualitative data and its analysis will refine and explain those statistical results by exploring participants' views in more depth.

The priority in this design is given to the qualitative method, because the qualitative research represents the major aspect of data collection and analysis in the study, focusing on in-depth explanations of quantitative results by exploring for maximal variations cases. A smaller quantitative component goes first in the sequence and is used to reveal the predicting power of the selected

external and internal factors to LMI groups not accessing finance and how the banks have assisted in this regard. The quantitative and qualitative methods are integrated at the beginning of the qualitative phase while selecting the participants for case study analysis and developing the interview questions based on the results of the statistical tests. The results of two phases will also be integrated during the discussion of the outcomes of the whole study.

i) Variables in the Qualitative Analysis

The research questions in the first, quantitative phase "What challenges (internal and external) can be identified that determine how LMI earners access urban shelter finance?" predetermine a set of variables for this study. LMI earners are considered a dependent variable, the outcome or result of the influence of the independent variables (Isaac and Michael, 1981), and are labelled "access to finance". It is a categorical variable and will be used as a grouping variable in the discriminant function analysis.

Selected factors which are internal and external to LMI earners and contribute to or impede access to finance are treated as independent or predictor variables because they cause, influence, or affect outcomes. These factors were identified through the analysis of the related literature, theories of access to finance (Aryeetey and Gockel, 1991), and a thematic analysis of individual semi-structured interviews with LMI groups and financial institutions, conducted over a five month period. The interview questions for the study were developed based on the discussed literature review and theoretical framework section of this study. These factors correspond to the research questions for Phase I and are the following:

- Basic information: name of community, length of stay in community, sex, marital status, number of household member;
- Socio-economic information: level of education, type of employment, sector of employment, location of employment;
- Housing history: housing ownership, tenure and financing, housing quality;
- Housing demand: home ownership
- Household financial status: contributors of household finances, recipients of household finances;
- Loan use: how to access financial institutions for housing loans, ability to access a loan, interest rates, banking fees, access to financial intermediation in communities;
- Financial services history and demand: household savings and deposits, informal groups, other household finances, formal loans, potential demand for formal loans.

Based on these factors 12 predictor variables were identified: "community", "socio-economic status", "housing ownership, tenure and financing", "housing quality", "home ownership", "contributors/recipients of household finances", "interest rates", "household savings and deposits", "informal groups", "other household finances", "formal loans", "potential demand for formal loans".

ii) Predictor Variable in the Quantitative Analysis

Table 3.1 below represents the relationship between the factors and variables, and lists the survey items that measure each variable.

Table 3.1: Predictor Variable in the Quantitative Analysis

Factors	Predictor Variables	Survey Items
Related to basic information	"community"	Q1 - 5
Related to Socio-economic information	"socio-economic status"	Q6 – 10
Related to Housing history	"housing ownership, tenure and financing"	Q11 – 19
	"housing quality"	Q20 - 23
Related to housing demand	"home ownership"	Q24 – 34
Related to household financial status	"contributors/recipients of household finances"	Q35 – 42
Related to loan use	"interest rates"	Q43 – 58
Related to financial services history and demand	"household savings and deposits"	Q59 – 60
	"informal groups"	Q61 – 64
	"other household finances"	Q65 – 70
	"informal loans"	Q71 - 82
	"formal loans"	Q83 – 103
	"potential demand for formal loans"	Q104 - 115

These variables are measured on a 5 to 7-point Likert-type scale in the questionnaire. Likert scaling is a bipolar scaling method, measuring positive and negative response to a statement. Sometimes Likert scales are used in a forced choice method where the middle option of "Neither agree nor disagree" is not available. Likert scales may be subject to distortion from several causes. Respondents may avoid using extreme response categories (central tendency bias); agree with statements as presented (acquiescence response bias); or try to portray themselves or their group in a more favourable light (social desirability bias). For the test to have a statistical power, each variable is represented by at least three items on the scale in the survey instrument.

Demographic characteristics, such characteristics, such as gender, family status, age, level of education or employment function as moderator variables. They affect direction and/or strength of the relation between an independent and a dependent variable which accounts for the "interaction

effect between an independent variable and some factor that specifies the appropriate condition for its operation" (Baron and Kenny, 1986, p. 1174).

3.3 Research Philosophy

The research philosophy that informs this study is the pragmatist perspective (Teddlie and Tashakkori, 2009) because it allows for a set of ideas to be articulated by many people, from historical figures such as Dewey, James and Pierce to contemporaries such as Murphy, Rorty and West. It draws on many ideas including using "what works using diverse approaches, and valuing both objective and subjective knowledge (Cherryholmes, 1992). This "dialectical perspective recognizes that using competing paradigms gives rise to contradictory ideas and contested arguments, features of research that are to be honoured and that may not be reconciled (Greene and Caracelli, 1977, 2003). Such oppositions reflect different ways of making knowledge claims. It is widely accepted that the paradigm adopted by the researcher shapes the way he perceives the world (Kuhn 1962; Lakatos 1970; Feyeraband 1978). There is no single scientific method that applies to comparative studies; it is argued that the choice made is driven by the research questions being answered (Denzin and Lincoln 1994; Aghaunor, Fotoh and Lindh 2006). However, it is agreed that multiple methods in comparative research helps in achieving greater understanding (Keeves and Adams 1994; Tobin and Frazer 1998). Although, quantitative and qualitative philosophies have contributed to the development of mixed methods research, pragmatism has been considered the best philosophical foundation for justifying the combination of different methods within one study (Howe, 1988; Datta, 1994).

3.4 Research Orientation

This research orientation is rooted in pragmatism as a philosophy which includes the use of induction (or discovery of patterns or gaining an understanding of the meanings humans attach to events, a closer understanding of the research context, and collection of qualitative data), deduction (moving from theory to data, the collection of quantitative data, testing of theories and hypotheses, explanation of casual relationships between variables, application of controls to ensure validity of data and the selection of sufficient sample sizes in order to generalize conclusions), and abduction (uncovering and relying on the best of a set of explanations for understanding one's result) (de Waal, 2001). This perspective maintains that mixed methods research may be viewed strictly as a "method" thus allowing the researcher to use any number of philosophical foundations for its justification and use. Thus the best paradigm has been determined by the researcher and the research problem not by the method. This study is inductive in nature for it seeks to explore and understand the challenges experienced by LMI groups to access affordable finance for housing.

3.5 Research Methodology

Redman and Mory (1923) define research as a "systematised effort to gain new knowledge". Humans are generally very inquisitive in nature and this inquisitiveness is the mother of knowledge and the method employed by humans to gain knowledge of the unknown research. Research thus is an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit for answers with the help of study, observation, comparison and experiment.

Research methodology is a way of systematically solving research problems. It may be understood as the science of how research is done. The purpose of this research is to understand, to establish and to explain phenomena about lending practices and access to finance by LMI groups for housing and or shelter. The research strategy is linked to the chosen research philosophy of the pragmatist perspective which reflects both quantitative and qualitative approaches to the extent that they provide a solution to the problem. The methodology carried out for this study will be a mixed methodology representing field surveys in the form of questionnaires (quantitative) and theoretical in the form of multiple case studies for methods of analysis.

The scientific methods of the study undertaken are the 'how to' aspects of the research study including who or what settings to be studied, which data to collect, how to collect these data, how to manage and integrate these data, and how to approach the data analysis. Qualitative methods are, by nature, relatively open-ended and include interviews, stories, observations, and notes. In order for the researcher to gather the qualitative data, interaction by means of face-to-face interviews were conducted to gain an understanding of what the real issues on the ground were. These data were typically approached through substantive content analysis, explored for a priori and emergent themes, excerpted and coded, and explored for the deeper patterns within commonly coded excerpts and the relations between differentially coded content. Quantitative methods included the use of measurement scales, checklists, tests, demographics, and the application of code weight systems and were typically analysed through univariate, bivariate, and multivariate statistical techniques. Mixed method research is the flexible and creative application of some variety of approaches within the research study. In this study, methodological decisions are problem-based, rather than method based, to allow the researcher to benefit from the strengths inherent in both qualitative and quantitative approaches. This blending can take many forms and, accordingly, the approaches were responsive and adaptive (Carpi and Egger, 2008).

Qualitative data is valued for being rich, natural, detailed, contextualized, sensitive, and filled with the authentic and complex representations through which people communicate meaning in their lives. Quantitative data are highly structured, relatively inexpensive to collect and analyse, and

central to the systematic study of empirical (numbers) properties and relationships. Quantitative data tell us a great deal about things like how many people are like 'this or that', which characteristics of the world are related to each other, and how many people benefited from a new program or intervention. Qualitative data tell us more about 'how' and 'why' things are happing in people's day-to-day activities and routines, the nature of the relations between phenomena in the world, and the mechanisms through which people may have benefited from a new program or intervention. Naturally, getting the best of both from both approaches broaden and deepened the understanding of the phenomena on which the researcher focused the research (www.dedoose.com).

3.6 Time Horizon

The time horizon of the research process is dependent on the research question as well as the methodology which were divided into a cross-sectional and longitudinal study. The cross-sectional study is a 'study of a particular phenomenon at a particular time' (Saunders, Lewis and Thornhill 2009, p.155), while the longitudinal is a study over a longer period of time. Considering the time limit, this study is undertaking a cross-sectional study. In which data is collect only once. A field survey was carried out in Accra from July 2011 to the end of February 2012 to collect empirical data. Data were collected from individuals classified as LMI earners who lived and worked in the AMA. A total of 75 questionnaires were administered to individuals in the AMA which was not necessarily gathered at the same time.

It took a longer period for example to find out from bank employees scattered all over the AMA, what banking products are available to LMI groups and to ask LMI groups between the ages of 35-44 for the need to borrow money for property acquisition in a survey which took over a period of two weeks.

3.7 Sampling Approaches

It is incumbent on the researcher to clearly define the target population. There are no strict rules to follow, for which the researcher relied on logic and judgment. The population is defined in keeping with the objectives of the study.

The population is too large for the researcher to attempt to survey all of its members. A small, but carefully chosen sample of 75 respondents is used to represent the population as the study seeks to illustrate a qualitative approach to demonstrate the understanding about the data sources without seeking representativeness or generalization. The sample reflects the characteristics of the population from which it is drawn.

Sampling methods are classified as either *probability* or *non-probability*. This study is classified as a probability sample, where each member of the population has a known non-zero probability of being selected. Probability methods include random sampling, systematic sampling, and stratified sampling. In non-probability sampling, members are selected from the population in some non-random manner (Walonick, 1997-2004). These include convenience sampling, judgment sampling, quota sampling, and snowball sampling. The advantage of probability sampling is that sampling error can be calculated. Sampling error is the degree to which a sample might differ from the population. When inferring to the population, results are reported plus or minus the sampling error. In non-probability sampling, the degree to which the sample differs from the population remains unknown.

The target population in this study will be the LMI groups living and working in Accra who usually would not gain access to housing finance due to low incomes which are not regular and are not able to service the loans that are taken out. Similarly, part of the target population will be both formal and informal financial institutions who may offer products that are suitable and tailored for the LMI earners.

For the purpose of the first quantitative phase of the study a convenience sample (Dillman, 2000) will be selected, which encompasses two income groups: low and moderate income earners who cannot access housing finance.

For the purpose of the second, qualitative phase of the study, the purposeful sample, which implies intentionally selecting individuals to learn to understand the central phenomenon (McMillan and Schumacher, 1994; Miles and Huberman, 1994), for example, senior management employees from both formal and informal financial institutions will be used. The idea is to purposefully select informants, who will best answer the research questions and who are "information-rich" (Patton, 1990, p. 169) persons.

Due to the sequential design of this study, the selection of the participants for the second, qualitative phase will depend on the results from the first, quantitative phase. Based on these results, *maximal variation* sampling, in which the researcher samples cases or individuals differing on some characteristics, will be used. This will allow the researcher to present multiple perspectives of individuals to "represent the complexity of our world" (Creswell, 2002, p.149). For this study, the participants will be selected based on the statistically significant difference results from the discriminant function analysis: potential participants will vary on how they respond to the questions making up the variable yielding a statistically significant discriminant function. In case none of the discriminant functions is statistically significant, the participants will be selected based on their

different responses to the variable making up the factor with the highest eigenvalue in factor analysis.

3.8 Measurement

Measurement is at the core of doing research. It is the assignment of numbers to things. *"Those who speak most of progress measure it by quantity, not quality"* (George Santayana). In almost all research, everything has to be reduced to numbers eventually. Precision and exactness in measurement are vitally important. The measures are what are actually used to test the hypotheses. Therefore the researcher needs good measures for both independent and dependent variables

which consist of two basic processes, called conceptualization and operationalisation, then an advanced process called determining the levels of measurement, and then even more advanced methods of measuring reliability and validity for which the researcher relied on extensively in proving the hypotheses discussed in chapter 2.

3.8.1 Levels of measurement

A level of measurement is the precision by which a variable is measured. For 50 years, with few detractors, science has used the Stevens (1951) typology of measurement levels. There are three things to remember about this typology: (1) anything that can be measured falls into one of the four types; (2) the higher the type, the more precision in measurement; and (3) every level up contains all the properties of the previous level. The four levels of measurement, from lowest to highest, are nominal, ordinal, interval and ratio.

The nominal level of measurement describes variables that are categorical in nature. The characteristics of the data that is being collected fall into distinct categories. If there are a limited number of distinct categories (usually only two), then the researcher will be dealing with a discrete variable. If there are an unlimited or infinite number of distinct categories, then the researcher will be dealing with a continuous variable. Nominal variables include demographic characteristics like sex, race, and religion.

The ordinal level of measurement describes variables that can be ordered or ranked in some order of importance. It describes most judgments about things, such as big or little, strong or weak. Most opinion and attitude scales or indexes in the social sciences are ordinal in nature.

The interval level of measurement describes variables that have more or less equal intervals, or meaningful distances between their ranks. For example, if you were to ask somebody if they were first, second, or third generation immigrant, the assumption is that the distance or number of years,

between each generation is the same. All crime rates in criminal justice are interval level measures, as is any kind of rate.

The ratio level of measurement describes variables that have equal intervals and a fixed zero (or reference) point. It is possible to have zero income, zero education, and no involvement in crime, but rarely do we see ratio level variables in social science since it's almost impossible to have zero attitudes on things, although "not at all", "often", and "twice as often" might qualify as ratio level measurement Stevens (1951).

Advanced statistics require at least interval level measurement, so the researcher always strives for this level, accepting ordinal level (which is the most common) only when necessary. Variables should be conceptually and operationally defined with levels of measurement in mind since it is going to affect how well the researcher can analyse the data later on.

3.8.2 Reliability and Validity

For a research study to be accurate, its findings must be reliable and valid. Reliability means that the findings would be consistently the same if the study were done over again. Validity refers to the truthfulness of findings; if you really measured what you think you measured, or more precisely, what others think you measured. Again, think of a typical multiple choice exam in college; does it really measure proficiency over the subject matter, or is it really measuring IQ, age, test-taking skill, or study habits?

A study can be reliable but not valid, and it cannot be valid without first being reliable. You cannot assume validity no matter how reliable your measurements are. There are many different threats to validity as well as reliability, but an important early consideration is to ensure you have internal validity. This means that you are using the most appropriate research design for what you're studying (experimental, quasi-experimental, survey, qualitative, or historical), and it also means that you have screened out spurious variables as well as thought out the possible contamination of other variables creeping into your study. Anything you do to standardize or clarify your measurement instrument to reduce user error will add to your reliability.

It's also important early on to consider the time frame that is appropriate for what you're studying. Some social and psychological phenomena (most notably those involving behaviour or action) lend themselves to a snapshot in time. If so, your research need only be carried out for a short period of time, perhaps a few weeks or a couple of months. In such a case, your time frame is referred to as cross-sectional. Sometimes, cross-sectional research is criticized as being unable to determine cause and effect, and a longer time frame is called for, one that is called longitudinal, which may add years

onto carrying out your research. There are many different types of longitudinal research, such as those that involve tracking a cohort of subjects (such as schoolchildren across grade levels), or those that involve time-series (such as tracking a third world nation's economic development over four years or so). The general rule is to use longitudinal research the greater the number of variables you've got operating in your study and the more confident you want to be about cause and effect (Carmines and Zeller, 1979).

3.8.3 Methods of Measuring Reliability

There are four good methods of measuring reliability:

- test-retest
- multiple forms
- inter-rater
- split-half

The _test-retest_ technique is to administer your test, instrument, survey, or measure to the same group of people at different points in time. Most researchers administer what is called a pre-test for this, and to troubleshoot bugs at the same time. All reliability estimates are usually in the form of a correlation coefficient, so in this instance, the researcher calculated the correlation coefficient between the two scores on the same group and report it as the reliability coefficient.

The _multiple forms_ technique has other names, such as parallel forms and disguised test-retest, but it is simply the scrambling or mixing up of questions on your survey, for example, and giving it to the same group twice. This was done by the researcher to prove the robustness of the survey questionnaires to provide a more rigorous test of reliability.

Inter-rater reliability is most appropriate when you use assistants to do interviewing or content analysis for you. To calculate this kind of reliability, all you do is report the percentage of agreement on the same subject between your raters, or assistants. The researcher used an assistant to do interviewing and content analysis to calculate the inter-rater reliability.

Split-half reliability is estimated by taking half of your test, instrument, or survey, and analysing that half as if it were the whole thing. Then, you compare the results of this analysis with your overall analysis. There are different variations of this technique, one of the most common being called Cronbach's alpha (a frequently reported reliability statistic) which correlates performance on each item with overall score. The research survey questionnaires are designed to demonstrate how well something estimates actual day-by-day behaviour; how well something estimates some future event or manifestation that has not happened yet which adopts the Cronbach's alpha reliability test to

each surveyed question correlating its performance to an overall score which in turn allows the researcher to interpret the reliability statistic. Another technique, closer to the split-half method, is the Kuder-Richardson coefficient, or KR-20. Statistical packages on most computers will calculate these for you, although in graduate school, you will have to do them by hand and understand that all test statistics are derived from the formula that all observed scores consist of a true score and error score.

3.8.4 Methods of Measuring Validity

There are four good methods of estimating validity:

- face
- content
- criterion
- construct

Face validity is the least statistical estimate (validity overall is not as easily quantified as reliability) as it is simply an assertion on the researcher's part claiming that they have reasonably measured what they intended to measure. It is essentially a "take my word for it" kind of validity. Usually, a researcher asks a colleague or expert in the field to vouch for the items measuring what they were intended to measure.

Content validity goes back to the ideas of conceptualization and operationalisation. If the researcher has focused in too closely on only one type or narrow dimension of a construct or concept, then it is conceivable that other indicators were overlooked. In such a case, the study lacks content validity. Content validity is making sure you have covered all the conceptual space. There are different ways to estimate it, but one of the most common is a reliability approach where you correlate scores on one domain or dimension of a concept on your pre-test with scores on that domain or dimension with the actual test. Another way is to simply look over your inter-item correlations.

Criterion validity is using some standard or benchmark that is known to be a good indicator. A researcher might have devised a police cynicism scale, for example, and they compare their Cronbach's alpha to the known Cronbach's alpha of say, Neiderhoffer's cynicism scale. There are different forms of criterion validity: concurrent validity is how well something estimates actual day-by-day behaviour; predictive validity is how well something estimates some future event or manifestation that hasn't happened yet. The latter type is commonly found in criminology. Suppose you are creating a scale that predicts how and when juveniles become mass murderers. To establish predictive validity, you would have to find at least one mass murderer, and investigate if the

predictive factors on your scale, retrospectively, affected them earlier in life. With criterion validity, you are concerned with how well your items are determining your dependent variable.

Construct validity is the extent to which your items are tapping into the underlying theory or model of behaviour. It is how well the items hang together (convergent validity) or distinguish different people on certain traits or behaviours (discriminant validity). It is the most difficult validity to achieve. You have to either do years and years of research or find a group of people to test that have the exact opposite traits or behaviours you are interested in measuring (Cronbach, 1970).

Table 3.2: A List of Threats to Reliability and Validity

Threats	Description
Ambiguity	when correlation is taken for causation
Apprehension	when people are scared to respond to your study
Compensation	when a planned group or people contrast breaks down
Demoralization	when people get bored with your measurements
Diffusion	when people figure out your test and start mimicking symptoms
History	when some critical event occurs between pre-test and post-test
Inadequate Operationalisation	unclear definitions
Instrumentation	when the researcher changes the measuring device
Interaction	when confounding treatments or influences are co-occurring
Maturation	when people change or mature over the research period
Mono-Operation Bias	when using only one exemplar
Mortality	when people die or drop out of the research
Regression to the Mean	a tendency toward middle scores
Rivalry	the John Henry Effect, when groups compete to score good
Selection	when volunteers are used, people self-select themselves
Setting	something about the setting or context contaminates the study
Treatment	the Hawthorne Effect, when people are trying to gain attention

Adapted from (Schuessler, 1985) _**Measuring Social Life Feelings**_

3.9 Phase I Quantitative Analysis

Data Collection

The first, quantitative phase of the study focuses on identifying internal and external factors contributing to the challenges LMI earners encounter when approaching financial institutions seeking loans to finance their homes. The cross-sectional survey design, which implies the data is collected at one point in time (McMillan, 2000), is used. The primary technique for collecting the quantitative data is a self-developed questionnaire, containing items of different formats: multiple choice, asking either for one option or all that apply, dichotomous answers like "Yes" and "No", self-assessment items, measured on the 5 - 7 point Likert-type, and open-ended questions. Financial institutions both formal and informal offering housing finance to LMIs were used to secure the

content validity of the survey instrument. The questionnaire consists of twenty-seven questions which are structured to ask questions related to the financial products that the institution offers, loan products, loan use and terms for repayment by LMIs. It includes the selection questions related to the types of product offerings to its clients and the ease of access by the LMI cliéntele illustrating the factors contributing to the decision to proceed or withdraw their applications for urban financing the financial institution.

The survey questionnaire was for both face-to-face and a web-based survey questionnaire via a programme called 'Fluid Surveys'. This survey tool is a web-based collector and analysis tool called Fluid Surveys was used to structure the questions and collect responses from respondents who were not available for face- to- face interviews. This software programme is available in the public domain and accommodates open-ended and closed-ended questions, rating and Likert Scales. Fluid Surveys uses information collected from respondents and codes it according to common themes and ideas and classifies it in terms of numerical scores. This programme can be used to generate descriptive statistics, i.e. percentiles, mean, standard deviations and variance that can be used to analyse and interpret the findings.

This web-based software was used because it provided a fast and convenient method of getting responses from interviewees. To boost the response rate, interviewees were contacted in advance and those that were not willing to meet for face-to-face interviews were given the option of completing the questionnaire via Fluid Surveys.

Interviews assessed through the URL, were emailed to all respondents who had access to the internet. Face-to-face responses were documented and then later captured via the URL for further analysis. One of the advantages of web-based surveys is that participants' responses will automatically be stored in a database and can be easily transformed into numeric data in excel, tables, chart and descriptive text. Reminder emails were sent to respondents who had not answered the questionnaire and were tracked via the web-based programme. This helped avoid the low response rate, which is typical of web-based surveys. To decrease the response rate error and solicit a relatively high response rate of the survey, a three-phase follow-up sequence was used (Dillman, 2000). To those subjects who would have not responded by the set date an e-mail reminder was sent after (1) five days was sent out; (2) ten days and (3) two weeks later stating the importance of the participant's input for the study.

Data Analysis

Before the statistical analysis of the quantitative survey results, the screening of the data would be conducted on the univariate and multivariate levels (Kline, 1998; Tabachnick and Fidell, 2000). Data screening would help identify potential multi-collinearity in data, because multivariate tests are sensitive to extremely high correlations among predictor variables. Outlying cases must also be excluded from the analysis, as a case that actually in one category of outcome may show a high probability for being in another category. These may result in poor model fit (Tabachnick and Fidell, 2000).

Data screening will include the descriptive statistics for all the variables, information about the missing data, linearity and homoscedasticity, normality, multivariate outliners, multi-collinearity and singularity. Descriptive statistics for the survey items will be summarised in the text and reported in tabular form. Frequencies analysis will be conducted to identify valid per cent for responses to all the questions in the survey.

The research questions on what challenges (internal and external) could be identified that determined how LMI earners accessed urban shelter finance predetermines the choice of statistical test and analysis to be used in the study to achieve the objectives. The purpose of this phase of analysis is to correctly predict the reasons why LMIs do not access and/or are not able to access funding for loans for housing purposes. The primary goal of discriminant analysis is to find the dimension or dimensions along which groups differ, as well as to find classifications to predict what the challenges are between LMIs and financial Institutions. The underlying assumptions of discriminant analysis are multivariate normality, homogeneity of variances and linearity. That is why data screening at a primary stage in the analysis is important. If data does not satisfy these assumptions, the statistical results will not be a precise reflection of reality. In case the data does not meet the underlying assumptions the transformation procedure will be performed.

The results of the analysis will be reported in the form of the discussion. The eigenvalues will provide the information of how much per cent of variance is accounted for by the discriminant function. The standardised coefficients of the discriminant function will indicate how much relative unique contribution to the group differences is provided by the predictor variables. The discriminant variate that best discriminates the groups will be defined based on the linear relationship formula. The structure coefficients will show the correlation between the response variable and the discriminant function. Functions at group centroids will provide the discriminant scores on the discriminant function for each group i.e. they will show how the groups differ on the discriminating variable. All

statistical analysis of the quantitative results will be conducted with the help of the web-based software called Fluid Surveys.

Reliability and Validity

In quantitative research, reliability and validity of the instrument are very important for decreasing errors that might arise from measurement problems in the research study. Reliability refers to the accuracy and precision of measurement procedure (Thorndike, 1997). Inter-item correlation will be examined on the basis of the correlation matrix of all items on the scale, corrected item-total correlation, and alpha if an item is deleted. The analysis will provide information on which items need rewording or even need removal from the scale.

Validity refers to the degree to which a study accurately reflects or assesses the specific concept or construct that the researcher is attempting to measure (Thorndike, 1997). Content, criterion-related, and construct validity of the survey instrument will be established. Content validity will show the extent to which the survey items and the scores from these questions are representative of all the possible questions about LMI groups and financial institutions who offer housing finance. For this, purpose, the self-designed survey questionnaire for this study will be compared on the consistency of the results with existing instruments, measuring the same construct, LMI groups and financial institutions who offer housing finance.

Construct validity seeks agreement between a theoretical concept and a specific measuring device or procedure. To achieve construct validity, factor analysis of the Likert type survey items will be performed after the major study. Factor loadings for survey items will show a correlation between the item and the overall factor (Tabachnick and Fidell, 2000). Ideally, the analysis should produce a simple structure, which is characterised by the following: (1) each factor should have several variables with strong loadings, (2) each variable should have a strong loading for only one factor, and (3) each variable should have a large community, i.e. degree of shared variance (Kim and Mueller, 1978). Construct validity also addresses the concern of having the results produced by one's measuring instrument being able to correlate with other related constructs in the expected manner (Carmines and Zeller, 1991). The results of this study will be correlated with the results obtained from other studies measuring related constructs (like identifying internal and external factors contributing to LMI groups not being able to access housing finance from financial institutions both formal and informal).

3.10 Phase II Qualitative Analysis

Data Collection

The second, quantitative phase in the study will focus on explaining the results of the statistical tests, obtained in the first, quantitative phase. The multiple case studies design (Stake, 1995) will be used for collecting and analysing the qualitative data.

A case study is a type of ethnographic design (LeCompte and Schensul, 1999; Creswell, 2002) and is an exploration of a "bounded system" or a case over time, through detailed in-depth data collection involving multiple sources of information and rich in context (Merriam, 1998; Creswell and Maietta, 2002). In this study, the instrumental multiple cases (Stake, 1995) will serve the purpose of "illuminating a particular issue" (Creswell, 2002, p.485), such as the challenges that determine how LMI earners access urban shelter finance which will be described and compared to provide insight into an issue and the objectives identified.

The primary technique will be conducting in-depth semi-structure face-to-face interviews with eight financial institutions (formal and informal) and LMI groups. Triangulation of different data sources is important in case study analysis (Creswell, 1998). Theoretical data will be used to validate the information obtained during the interviews. The content of the questions will be grounded in the results of the statistical test of the relationships between the LMI groups and the predictor factors as related to the financial institutions that administer loans to LMI earners, and will elaborate on them. The questions will focus on the issues of challenges to access to loans and about the details of the selected population group.

Data Analysis

In the qualitative analysis, data collection and analysis proceed simultaneously (Merriam, 1998). In the second, qualitative phase of the study, the text and image data obtained through the interviews, documents and elicitation materials will be coded and analysed for themes with the help of Fluid Surveys the web-based survey programme.

The steps in qualitative analysis will include: (1) preliminary exploration of the data by reading through the questionnaires administered; (2) coding the data by segmenting and labelling the text; (3) using codes to develop themes by aggregating similar codes together; (4) connecting and interrelating themes; and (5) constructing a narrative (Creswell, 2002). To augment the further discussion, a visual data display will be created to show the evolving conceptual framework of the factors and relationships in the data (Miles and Huberman, 1994).

Data analysis will involve developing a detailed description of each case of the basic information, socio-economic information, housing history, housing demand, household financial status, loan use and the financial services history and demand. During the analysis the researcher will situate the case within its context so the case description and themes are related to specific activities and situations involved in the case (Creswell and Maietta, 2002). This analysis is rich in the context or setting in which the case presents itself (Merriam, 1998). Based on this analysis, the researcher provides a detailed narration of the case, using either an elaborate perspective about some incidents, chronology or major events followed by an up-close description.

In multiple case study design, the analysis is performed at two levels: within each case and across cases (Stake, 1995). Analysis of this data can be a holistic analysis of the entire case or an embedded analysis of a specific aspect of the cases (Yin, 1994). In the proposed study, first, each case of the select LMI groups and financial institutions will be analysed for themes. Then, all cases will be analysed for themes that are either common or different. This will show the extent to which the identified internal and external factors have a similar or different effect on the study participants as related to their means of accessing housing finance from financial institutions. In the final phase, the researcher will interpret the meaning of the cases and report the "lessons learned" (Lincoln and Guba, 1985).

Establishing Credibility

The criteria for judging a qualitative study differ from quantitative research. In qualitative design, the researcher seeks believability, based on coherence, insight and instrumental utility (Eisner, 1991) and trustworthiness (Lincoln and Guba, 1985) through a process of verification rather than through validity and reliability measures. The uniqueness of the qualitative study within a specific context precludes its being exactly replicated in another context. However, statements about the researcher's positions – the central assumptions, the selection informants, the biases and values of the researcher – enhance the study's chances of being replicated in another setting (Creswell, 2003). To validate the findings, i.e., determine the credibility of the information and whether it matches reality (Merriam, 1998), four primary forms will be used in the second, qualitative, phase of the study: (1) triangulation – converging different sources of information (interviews, documents, artifacts); (2) member checking – getting the feedback from the participants on the accuracy of the identified categories and themes; (3) providing rich, thick description to convey the findings; and (4) external audit – asking a person outside of the study to conduct a thorough review of the study and report back (Creswell and Miller, 2002; Creswell, 2003).

3.11 Summary

The mixed methods research design for this study undertaken involves the use of both quantitative and qualitative analytical techniques within the same framework, which was guided either a priori, a posterior, or iteratively. The research design was based on the pragmatism paradigm such that it met the rationale of triangulation which involved the analysis of both data types, quantitative data and qualitative data, which occurred in two phases in which the quantitative analysis phase preceded the qualitative analysis phase and the findings from the initial analysis phase informed the subsequent phase or more than two phases (iteratively). The analysis strands do not interact until the data interpretation stage yielding a basic parallel mixed analysis.

The mixed analysis was phased, in which the mixed analysis takes place in two phases transforming the data interpretation. The mixed analysis is guided by an attempt to analyse data in a way that yields an analytical generalisation. At its most integrated form the research design, involves some form of cross-over analysis, wherein one or more analysis types associated with a different tradition (quantitative analysis) is used to analyse data associated with a different tradition (qualitative data).

The data collected in chapter four provides the research findings and analysis. Objective discussions of findings with regard to the sustainability, validity and importance underlying the study as well as how the findings identified fit into the existing body of literature and how it compares with the theoretical framework discussed in chapter two have been analysed against the identified data sample.

4. RESEARCH FINDINGS AND ANAYLSIS

"Our people need proper housing, not ghettos,"
Nelson Mandela – former South African President

4.1 Introduction

This chapter contexts the findings and analysis of empirical data collected from the case study country – Accra, Ghana. Descriptive statistics would be adopted to carry out preliminary data analysis on factors affecting housing finance supply in Accra. The descriptive statistics is used to describe the basic features of the data in this study. They summarise the samples and the measures, jointly with diagrammatic and graphic analysis, they provide a basis of every quantitative analysis of the data. The study is a detailed assessment of the role of both formal and informal financial institutions providing urban shelter finance to LMI groups. Discussed in chapter three; this study will use one of the most popular mixed methods designs in educational research: sequential explanatory mixed methods design, consisting of two distinct phases (Creswell, 2002, 2003; Creswell et al., 2003) in establishing what the challenges are in providing housing finance to LMI groups.

4.2 Review of Research Questions and Objectives

Determining the research questions is an extremely important step in both the quantitative research process and qualitative research process because these questions narrow the research objective and research purpose to specific questions that the researcher attempts to address in the study (Creswell, 2005; Johnson and Christensen, 2004). However, research questions are more important in mixed methods research because for purposes of this study the researcher has used the pragmatic method and system of philosophy. As such, in mixed methods studies, research questions drive the methods used (Newman and Benz, 1998; Tashakkori and Teddlie, 1998). Moreover, research questions in mixed methods studies are *vitally* important because they, in large part, dictate the type of research design used, the sample size and sampling scheme employed, and type of instruments administered as well as the data analysis techniques, for example, statistical or qualitative used.

Before stating the research questions and objections, a few reflections upon the basis for formulation of the research questions by the researcher to formulate precise research questions that required deep insights into the domain of the study was to investigate financing urban shelter options to LMI earners in the AMA where majority of the people do not have access to loans or mortgages.

In order to pursue the research paradigm, the following ***key research questions*** are posed:

i) Have conventional methods of financing urban shelter captured the groups that need their intermediation?

ii) What is the extent of financial intermediation to LMIs?

iii) What challenges can be identified that determine how LMI earners access urban shelter finance?

iv) How can the defined extent of financial intermediation for LMI earners be achieved?

The primary objective of this research study is to investigate financial intermediation for urban shelter, to LMI groups in the Accra Metropolis who cannot afford or access finance to purchase affordable and adequate residential units. The study will also examine the remaining challenges that must be overcome if Ghana's formal housing finance market is to reach maturity or a sustainable approach that encompasses all.

The secondary objectives are:

i) To examine the methods of financing urban shelter to LMI earners in Ghana.

ii) To investigate financial intermediation to LMI earners.

iii) To identify and analyse the challenges to intermediating to LMI earners to access urban shelter finance.

4.3 Description of sample and study area

The mortgage market in Ghana is gradually assuming a sophisticated and competitive dimension. It may attribute to the increasing demand for houses which leads to higher prices of properties, all things being equal (Addison, 2011). Apart from the demand factor, the supply factors such as interest rate risk, default risk and liquidity risk all contribute to the escalating cost of acquiring a house making it inaccessible by LMI groups as their incomes cannot cover the costs for the loan repayments.

The mortgage market in Ghana remains rudimentary but outstanding mortgage loans to customers for the purchase of residential property have increased tremendously due to improved macroeconomic and legal conditions. Ghana has some way to go to create the necessary systems to support mortgage lending although it is registering some progress. Mortgage debt to GDP, at 0.37 per cent in 2007, fell to 0.42 per cent in 2008, 0.3 per cent in 2009, and 0.25 per cent in 2010, in part due to the global financial crisis and the prevalence of borrowers from the diaspora in Ghana's mortgage book. The number is also low because supply is limited: there are essentially only two major lenders at present – HFC Bank with 30 per cent of market share and Ghana Home Loans, a specialised lender. Ghana Home Loans commenced operation in 2006. As of 2009 it had disbursed

over 550 loans worth close to US$40 million. Some new lenders are coming into the market, including international banks such as Barclays and Standard Chartered and SG-SSB (Societé Générale – Social Security Bank). These banks, however, tend to lend only to higher income salaried households, bank employees or favoured clients.

Deng, Zheng and Ling (2005) highlighted borrower's income and characteristics such as age, marital status, occupation, job position and education as important indicators to differentiate between high risk and low risk borrowers; these characteristics were adopted for the questionnaire. The study found that borrower's characteristics are significant in determining prepayment behaviour, hence may be used as an effective tool for screening potential high risk borrowers in the loan origination process. Adopting a risk-based pricing in residential mortgage lending in Ghana can improve the efficiency of the market, and enhance the credit availability to the most needed households, for example, the younger households, blue-collar workers, lower income households, and help them become homeowners.

One hundred and thirty questionnaires were distributed to borrowers of housing finance in the Accra metropolis between the months of July 2011 to February 2012. The borrowers of housing finance are described as individuals that are categorised as LMI earners and have approached financial institutions to request for housing loans regardless of whether they obtain the loans or not. Eighty-two questionnaires were returned, with seven questionnaires not properly completed. Therefore, the analysis was based on seventy five questionnaires, which translates to 63.08 per cent completion response rate. The response rate can be considered to be adequate in that housing finance demand is not the main focus of the study. In studies related to access and usage of finance, to get an accurate picture, a few household surveys are required to get an accurate picture (DFID 2004 p.6).

For the research methodology adopted, reliability and validity issues have to be considered. Lincoln and Guba (1985), Creswell (1998), Lincoln and Guba (2000), Creswell and Miller (2000), Bryman and Cramer (2001), Creswell (2003), explained reliability and validity in research. Reliability and validity are tests of the trustworthiness of the measurement instruments used in research (Blalock 1979, Carmines and Zeller 1979, Hulchanski 1979 and Babbie 2000). *Reliability* of a measure refers to the extent to which a test or measuring procedure yields the same result when tried repeatedly, that is consistent. It might be internal or external validity. External reliability is the more common of the two and refers to the degree of consistency of a measure over time. *Validity* is the extent to which a measure is actually in line with what the researcher sets out to measure and the extent to which the results can be applied to new settings.

4.4 Review of data collection methods

In economic transactions, a critical assessment of the supply side of the commercial entity is undertaken when there is demand for those goods and services. When there is no demand for the goods and services, attempts are not made to assess the supply side. The demand for housing finance is a derived demand because individuals are demanding for housing finance not for its sake but for home acquisition. While the aim of the study is to investigate factors affecting housing finance supply, it is important to consider the demand side of housing finance to LMI households in verifying the reasons why housing finance is not being supplied by the financial institutions and or financial intermediaries. Could it be that potential borrowers are not approaching the financial institutions to source for housing finance or is it that the lender's requirements are so stringent that individuals cannot meet up with this lender's requirements?

At the time this study was being conceptualized, it was considered necessary and important to obtain information using questionnaires in extracting information from LMI households of housing finance in Accra. The information relates to hindrances being encountered by them in accessing housing finance. Having obtained the information through data collection by means of a questionnaire survey, the result of the analysis would be used in discussing all factors that affects housing finance demand by LMI groups in Accra.

In adopting a mixed method research approach for a study involves using different forms of instruments for data collection. To investigate factors affecting supply side of housing finance to LMI households, secondary data were extracted from the balance sheets of finance institutions offering housing finance to LMI borrowers, archival data for the sectoral allocation of loans and advances from the sampled financial institutions and loans and advances from corporate banking managers and executives.

The interview was in the form of informal conversation or unstructured interview where questions emerge from the immediate context and are asked in the natural course of things and there are no predetermined wording or question topics (Patton 1990; Hughes 2002). Other forms of interviews identified are interview guide approach, standardized open-ended interview and closed quantitative interviews.

The basic reasoning adopted for the research study is the concept of "Analytical Generalisation" (Yin 1989; Egbu 2007). In analytical generalization, a study is conducted in a typical case study area, and the general conclusions reached are applied to other areas with similar situations. Survey questionnaires were dispatched to bank customers (household level) that have recently applied or enjoying housing finance from financial institutions to access information from those demanding for

housing finance and make the study reliable. This representativeness of data at household level is important to get an accurate picture of patterns of access and usage of housing finance supply across the population (Jones and Maclennan, 1987; DFID 2004 p.6).

The main survey instrument used for investigating factors affecting demand side of housing finance is the fully structured questionnaire. It means that all questionnaires administered were made of a set of pre-designed questions with a set of answers from which the respondents had to choose. This method has a main advantage in its ability to achieve reliability of measurements. In adopting this approach, respondents are restricted to a set of answers to ensure that consistent responses are obtained from all respondents. Other advantages of adopting this approach include the ease it provides in making statistical inferences and generalization of collected data (Punch, 2005). Again, it brings standardization to bear to the survey exercise since field assistants other than designer of the research was engaged in distributing and conducting the survey (Hammond 2006a and Egbu 2007). The need to use field assistants and the translation of survey questions into vernacular, if need be, require that questionnaires are pre-designed with a set of answers for respondents to pick from.

However, the major weakness of the pre-designed questions and answers approach has to do with the emphasis placed on the researcher's ability to determine beforehand, the items to include and the set of answers from which the respondents are to choose from. The respondents are somehow restricted in their choice of answers, though this weakness can be remedied by doing an extensive review of the literature for the study. Also the response rate is normally poor and there is the risk of shallow (non-useable) replies (Kometa 1995; Maisel and Perssel 1996 and Ejohwomu 2007).

4.5 Presentation and analysis of research findings

The presentation and analysis of the research findings is an extremely important step in both the quantitative and qualitative research process because the research questions narrow the research objectives and research purpose to specific answers that the researcher attempts to address in the findings of the study. The analysis proceeded in two steps. In the first, descriptive statistics were computed for various measures and tests were computed to identify significant differences between the demand of LMI borrowers acquiring housing finance and the supply of housing finance by financial institutions. In the second part of the analysis, descriptive regression models were estimated to determine if there are significant differences in housing finance demand and supply to LMI borrowers.

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4.5.1 LMI Access to Conventional Finance

Three types of explanatory variables are included in these models. One is the respondent's characteristics, in particular, his social class and age, the hypothesis being that the higher the social class and younger the respondents the more knowledgeable they will be and the more positive their attitude toward borrowing with a mortgage for home purchase and the need for financial intermediation. In short, the researcher tests for information asymmetries associated with these factors to illustrate the challenges faced by LMI borrowers in accessing housing finance.

a. Age

Graph 4.1: Distribution of Respondents by Age
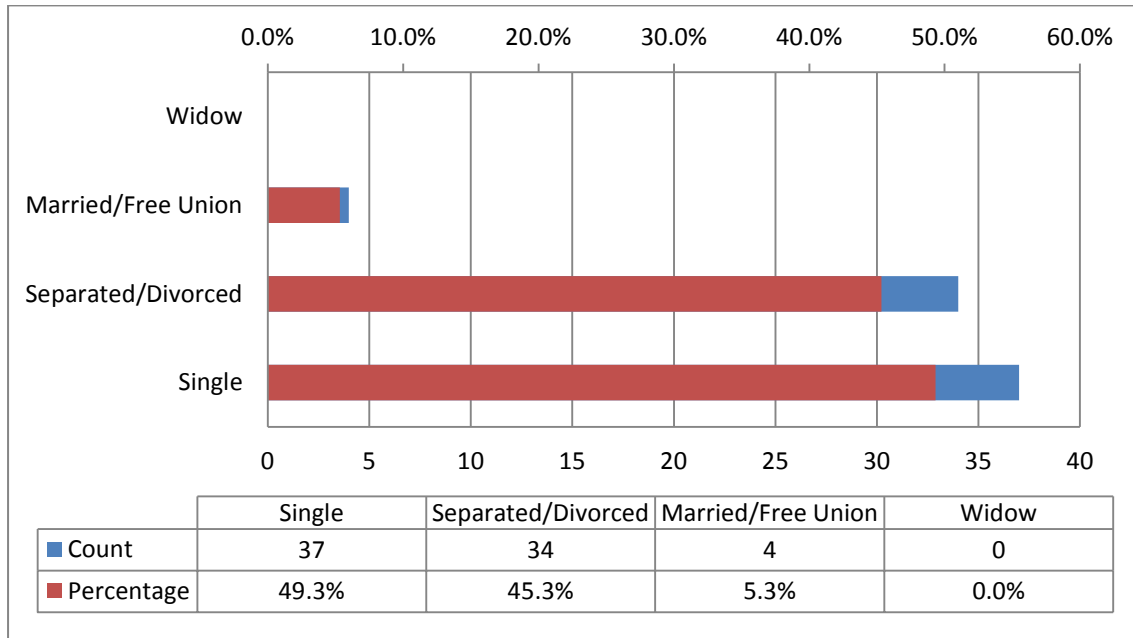**Source: Author's Field Survey, 2011**
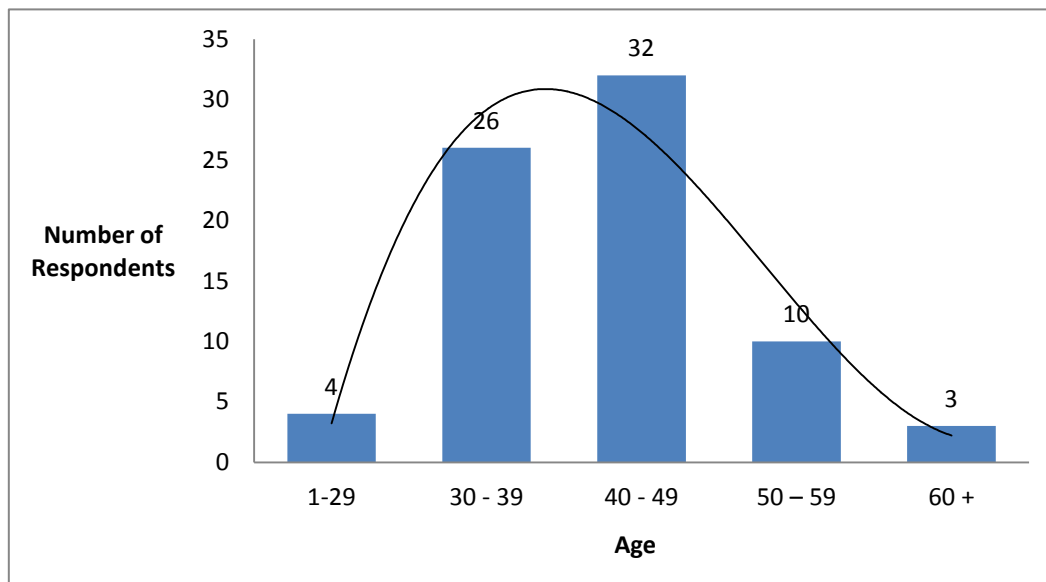
Graph 4.1 above, indicates the distribution of the ages of the respondents, thirty-two (42.7%) of respondents are in the age bracket of 40 – 49 years of age. The median age for these age groups is 44.5 years old. This outcome confirms studies by Haurin, Hendershot and Ling (1987); Maki (1993), Dusca and Rsenthal (1994), Bourassa (1995); Deutsch and Tamann (1995) which suggests that individuals between the ages of 30-50 years are potential homeowners.

Whether in the developed or the emerging economies, age is an important variable considered by the lenders'. Knowing the age of the potential borrower gives the lender an opportunity to determine the tenure of the lending up to the retirement age of sixty-five for men and sixty for women.

b. Marital Status

Table 4.1: Distribution of Respondents by Marital Status
Source: Author's Field Survey, 2011

	Single	Separated/Divorced	Married/Free Union	Widow
■ Count	37	34	4	0
■ Percentage	49.3%	45.3%	5.3%	0.0%

From the field survey conducted as shown in Table 4.1 above, it is observed that a high distribution of thirty-seven (49.3%) respondents are single and thirty-four (45.3%) were separated/divorced and four (5.3%) out of the total of seventy-five respondents were married or in a free union. This indicates that 94.6% of the respondents were sourcing for housing finance illustrating the demand for housing finance to capture the needs of LMI earners.

c. Education

Table 4.2: Distribution of Respondents by Sector of Education
Source: Author's Field Survey, 2011

Education	complete	incomplete	Total
Did not attend School	0 (0%)	25 (100%)	25
Primary School	12 (60%)	8 (40%)	20
Secondary School	9 (64%)	5 (36%)	14
Vocational	2 (50%)	2 (50%)	4
Tertiary	11 (92%)	1 (8%)	12
Total			**75**

From Table 4.2 above, out of the seventy-five respondents 54.7% respondents indicated that they had not completed their education and 45.3% respondents indicated that they had completed primary, secondary, vocational and tertiary education. Eleven respondents (92%) completed tertiary education and twenty-five (100%) respondents did not attend any formal education.

It can be observed that of the respondents by sector of education (Table 4.2) above, insights follow as well from paying closer attention to the psychology of financial decision-making (Thaler, 1990). Lessons from behavioural economics are naturally relevant for choices by poor and low-income households. In many instances individuals' decisions within a social group are correlated for reasons that have nothing to do with social learning or social imitation. Behaviour of individuals may be correlated simply because individuals in the same group have similar unobserved characteristics – for example, a common propensity to source finance from their own personal savings and income for housing – or share a common environment (Chart 4.2).

The data collected in Section B (Socio-economic Information) and Section C: (Housing History) of the questionnaires 92% of respondents who had tertiary education and the 50% of respondents who had vocational schooling indicated that they saw the need and value in engaging financial institutions for housing finance, although, 100% of the respondents who did not attend school preferred not to source housing finance from financial institutions but rather preferred to source from their own personal savings and income. The non-educated respondents who had completed or had not completed their studies were reluctant to engage and source financial institutions for housing finance. The survey also illustrated that those who did not have formal education did not bother to give any opinion despite the willingness of the questionnaire administrator to translate to

vernacular. Lack of formal education and knowledge about financial services disqualifies some of the respondents because it deters their judgement in accessing financial services to acquire basic human needs.

d. Sector of Employment

**Chart 4.1: Distribution of Respondents by Sector of Employment**
Source: Author's Field Survey, 2011
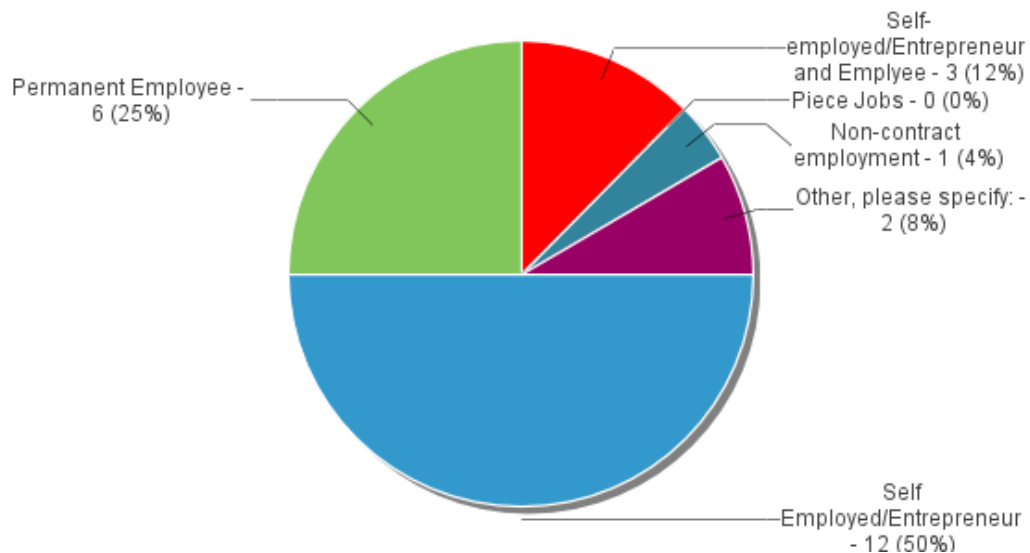
Out of the seventy-five respondents that responded twenty-four respondents (32%) disclosed their sector of employment. Three (12%) respondents were self-employed/entrepreneur, Zero (0%) respondents were in piece jobs, one (4%) in non-contract employment, two (8%) respondents were in other employment such as business development, banking and civil service employment, twelve (50%) respondents were self-employed/entrepreneur and six (25%) respondents were in permanent employment. There is a linkage between employment level and educational attainment; these respondents had the urge to express their opinions about sourcing for housing finance. This suggests that the self-employed/entrepreneur 50% of which had no formal education refused to source housing finance from financial institutions but would rather source finance from their savings and income which meant that they would rather fund their housing needs incrementally. As opposed to the educated respondents who preferred to source additional funds in addition to their income.

Chart 4.2: Distribution of Respondents by Sector of Employment and Level of Education
Source: Author's Field Survey, 2011
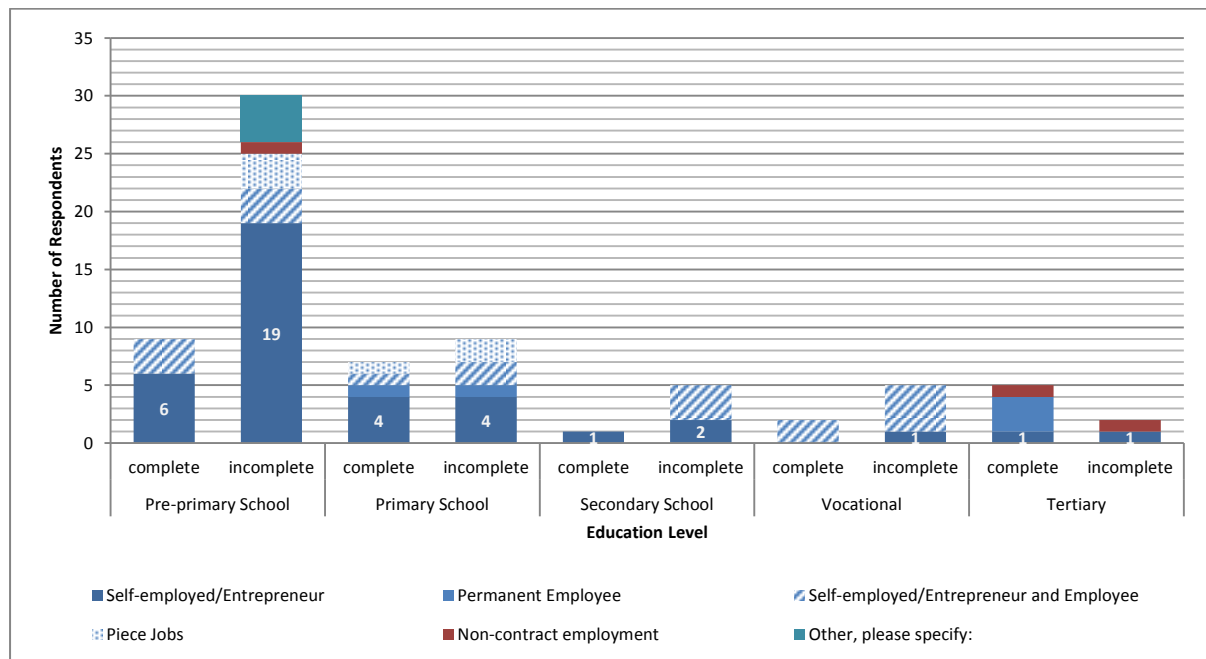
Everyone deserves access to affordable housing and equal pay for equal work, and yet many people are denied these rights on a daily basis. Both of these factors impede one's ability to live a full and productive life and they contribute to homelessness.

Respondents were drawn from five sectors of employment and were ranked according to their various levels of education which indicated from Chart 4.2 above that respondents who had attained higher levels of education (tertiary) were willing and able to obtain housing finance. This is because their increased knowledge enabled them to acknowledge the benefits of housing finance in supplementation to their incomes than relying solely on their personal savings and remittances as alternative sources of financial aid.

In contrast to the moderate (vocational) and the lower (pre-primary, primary and secondary school) levels of education illustrated high levels of individuals who did not complete school and did not acknowledge the need to obtain housing finance. The respondents instead preferred to rely on their personal savings to finance their housing needs. This to a large extent indicates that the levels of education attained play a major role in the need to access loans.

e. Housing Ownership, Tenure and Financing

Housing finance is a major factor determining the ownership and tenure of housing intake by LMI earners. The overall financial capabilities of the individual, the stability and effectiveness of the financial system play a pivotal role in the source of finance that can be accessed by the individual for their housing aspirations.

Chart 4.3: Distribution of Respondents by Type of Dwelling
Source: Author's Field Survey, 2011
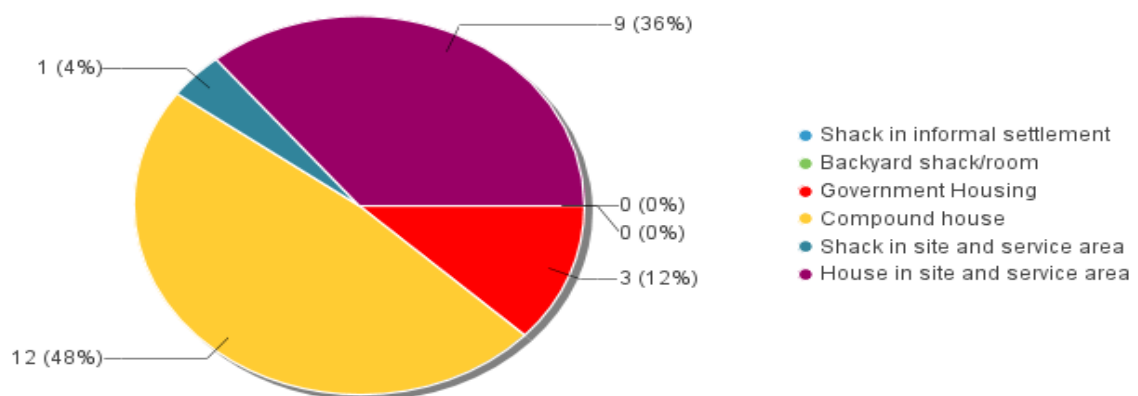
Respondents to chart 4.3 above illustrate the type of dwelling that respondents commonly reside: 48% of respondents live in a compound house, 36% of respondents live in a house in site and serviced area, 12% of respondents live in government housing 4% of respondents live in a shack in informal settlement, and 0% of respondents live in backyard shack or room.

To analyse housing ownership, tenure and financing demand to LMI groups in Accra, Table 4.4 and Table 4.5 below will be discussed together.

Table 4.4 below illustrates the tenure accommodation that LMI groups typically hold for housing. The table indicates the length of stay respondents have occupied in rented accommodation which is usually in the form of compound housing, as they are unable to source finance for housing or to access suitable that is affordable, so they prefer to rent for long periods at a time whilst they mobilize resources from their savings to buy or build a house.

Table 4.3: Distribution of Respondents by Tenure in Dwelling
Source: Author's Field Survey, 2011

Tenure	Chart	Count	Percentage
Less than 1 year		5	20%
2 – 5 years		11	44%
6 – 10 years		6	24%
11 – 15 years		0	0%
16 – 20 years		2	8%
25 – 30 years and above		1	4%
	Total Responses	**25**	**100%**

Table 4.3 above and Table 4.4 below are indicative of the housing tenure and ownership of the respondents. 20% of the respondents have lived in a dwelling for less than one year which many of the respondents had indicated that they lived in the dwelling for free or had made some kind of monetary offering for the rental to the landlord as a gesture of good faith, as is indicated in Table 4.4 below where 16% of respondents indicated that they lived in the dwelling rent free. 44% of the respondents have lived in their current dwelling for a minimum period of 2 – 5 years of which all respondents indicated is rented accommodation as illustrated in Table 4.4 below where 52% of responses indicated rented accommodation. 24% of the respondents indicated that they had lived in their dwelling for a period of 6 -10 years of which out of the count of a total of 6 respondents, 4 respondents owned and 2 respondents rented the dwelling. Respondents who had tenure in dwellings between 16 -20 years and 25 – 30 years and above owned their property. The minimum tenure of 11-15years (0%) which financial institutions would like to see before affording a low is not a common trait amongst the LMI groups.

Table 4.4: Distribution of Respondents by Housing Ownership

Source: Author's Field Survey, 2011

Response	Chart	Count	Percentage
Rent		13	52%
Own		7	28%
Live rent free		4	16%
Other, please specify:		1	4%
	Total Responses	**25**	**100%**

Table 4.4 illustrates the high rental housing rate of 13 (52%) respondents is a sufficient deterrent to a number of financial institutions because the quality and security of the property (refer to Chart 4.3 above), where 12 (48%) respondents live in a compound house is to be used as collateral falls short of the standard required by borrowers as collateral. This amounts to risk because financial institutions cannot ascertain the security of the lender.

Chart 4.4: Distribution of Respondents by Sourcing Finance
Source: Author's Field Survey, 2011
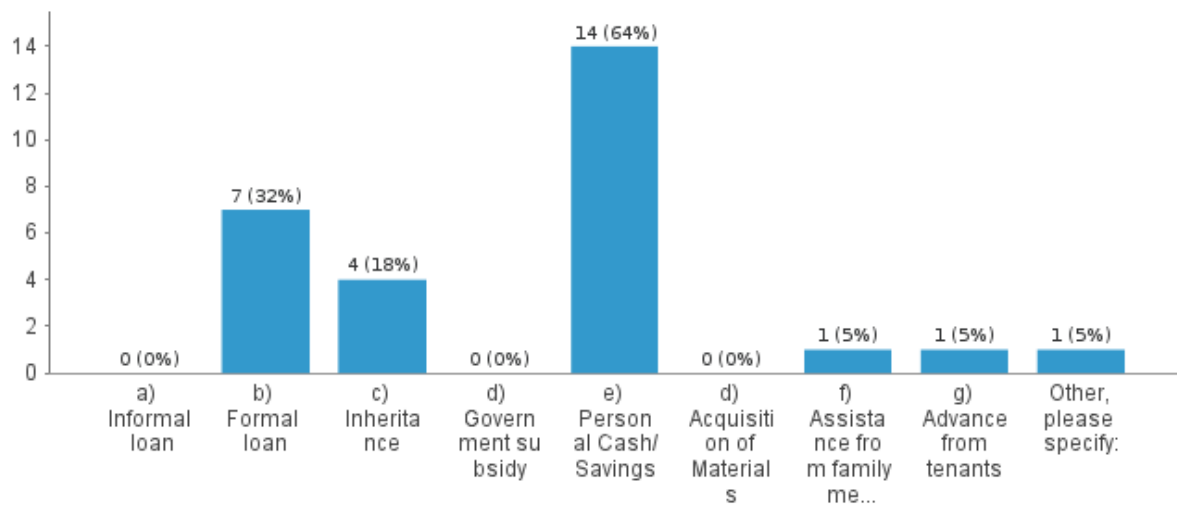
When respondents were asked as to how they would fund their housing, seven (32%) respondents indicated that they were assisted by formal institutions and four (18%) of respondents stated that they inherited their properties. Fourteen (64%) of the respondents indicated that they would fund their housing finance by means of personal cash or savings. One (5%) respondents stated that they received assistance from family members, advance from tenants and remittances from abroad but even so, it would not sufficiently supplement the cost of affording a loan for housing finance.

From the literature, while Ndulu, Chakraborti, Lijane, Ramachandran and Wolgin (2007) defined access as "ensuring provision of financial services that entail appropriate products, reasonable cost and physical proximity", Bramley (1993 p.823) looked at access as "the formal rules governing households' ability to obtain housing. The definition of access ascribe to Ndulu et al (2007) is relevant to developed economies rather than the emerging economies. Neither of these two definitions was applicable to housing finance accessibility in Accra. In chart 4.4 (above), 64% of respondents use their hard earned personal cash or savings which they do not save with the banks but have some form of an account with a financial institution. Why do we have individuals saving with formal and informal institutions but cannot access housing loans from these institutions? Could it be that their lending conditions are too stringent? Loans provided by employers is becoming a major source of finance for housing acquisition but still LMI groups refuse to access such alternatives because they prefer to fund housing out of their hard earned personal cash or savings.

The respondents as shown in chart 4.4 do not support the government subsidies and many refused to engage informal financial institutions. Based on their levels of education and cultural believes respondents preferred to use their personal cash or savings because accessing financial institutions is perceived as a means beyond their reach. Interest rates, loan conditions and repayment periods are not conducive for their needs as LMI groups as the respondents who took part in the questionnaire had no regular income to make regular loan repayments as required by financial institutions.

Access to housing by the LMI groups is so expensive and normally beyond their means. Apart from this, within the Greater Accra Metropolitan Area affordable housing for the LMI groups is not available and the only option for these groups is to purchase housing or land for constructing housing at the peri-urban areas where it is relatively cheap.

Income levels for LMI groups are generally low as compared to the cost of building materials which rises almost every day. In order to avoid the issue of borrowers taking larger loan amounts than they can afford and to avoid non regular repayments of longer loan terms, financial institutions provide small loans at shorter terms. Every loan amount is matched against the client's income and only given the amount their income can support. Hence granting a loan to this category meant on has to examine their capacity to pay which might be commensurate to the loan amount requested therefore, the need to seek additional funds for financing home improvements.

Once the lender reduces the loan amount to the level of affordability, it forfeits the purpose of the loan as it will no longer be enough to cover the home improvement cost estimated by the borrower.

4.5.2 Demand for Housing Finance

The demand for loanable funds is a representation of demand for an increased stock of debt, to finance present aggregate demand for consumption, investment or government expenditure on goods and services (Pilbean 2005; Wickens 2008). The demand for loanable funds is determined by the following:

i)   *Investment demand* – Long term investment for capital projects schools and housing are usually financed by borrowing. When need arises, these are usually considered as investment demand which results in demand for loanable funds. Chart 4.5 below indicates the investment demand for housing. Eighteen (78%) respondents were planning to buy or build a house in the five years' time and five (22%) were not.

Chart 4.5: Distribution of Respondents by Housing Demand
Source: Author's Field Survey, 2011
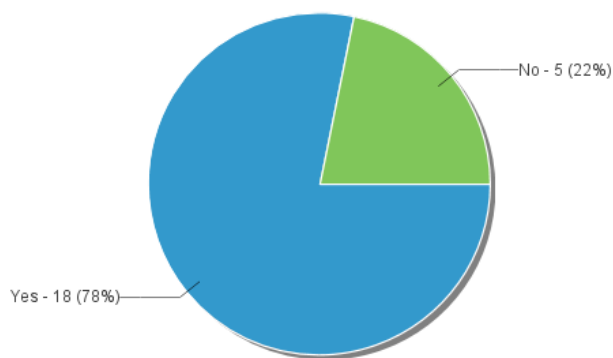
ii)   When income of individuals are increased, they are prepared to consider increased borrowing in that they can afford extra borrowings (Girouard et al 2007; Gyntelberg et al 2007). All respondents with incomes ranging from GHS 50 to GHS 450 indicated that they would not source finance from financial institutions because their income did not meet the institutional requirements for extra borrowings. This is due to the irregular employment structure that would place and additional strain on their income should they source extra finance in conjunction to the basic income. The basic income received or gained by the individual would not recover the loan repayments required by the banks placing a strain on the individual's capacity with the financial institution. Respondents with greater than GHS 450 income acknowledged and appreciated the need for extra borrowings because their regular incomes were not strained and could catered for the additional repayments of a loan.

Table 4.5: Distribution of Respondents by Monthly Income

Source: Author's Field Survey, 2011

Response	Chart	Count	Percentage
Between GHS 50 – 150		6	24%
Between GHS 150 – 250		1	4%
Between GHS 250 – 350		6	24%
Between GHS 350 – 450		1	4%
> GHS 450		11	44%
Total Responses		**25**	**100%**

For this study, data was collected from LMI groups at the household level who usually are the under-banked and not catered for by financial institutions for housing loans. It was argued by DFID (2004 p.6) that representative data at household level is required to get an accurate picture of patterns of access and usage across the population.

Various authors have taken different positions on definition of income. While in the United States, Muth (1960), Reid (1962), Lee (1963 and 1968) and recently, Chiuri and Jappelli (2003) all applied permanent income as a variable in their housing model, Whitehead (1971) and Karley (2008) observed relevant income variable as personal disposable income. It is argued that it is out of the disposable income that a lender determines the amount borrowers can afford to spend on housing.

Referring to Table 4.6 below, respondents were also asked if they had applied for a loan for assistance, thirteen (72%) respondents said no, one (6%) said yes, but was rejected, no respondents said yes and did not take it and four (22%) said yes, and took it.

Table 4.6: Distribution of Respondents who have applied for a Loan from a Financial Institution, Government, Intermediary, and Susu
Source: Author's Field Survey, 2011

Response	Chart	Percentage	Count
No		13	72%
Yes, but was rejected		1	6%
Yes, was approved but did not take it		0	0%
Yes, and I took it		4	22%
	Total Responses	**18**	**100%**

Table 4.7 below indicates the known litmus test that is applied to potential borrowers to assess the ability of the borrower to honour his or her part of the loan contract as discussed in chapter two by Karley (2002). This not only indicates the reasons why respondents are reluctant and not willing to access loans for housing but indicates to financial institutions the ability of an individual to honour the loan contract commitments.

Table 4.7: Distribution of Respondents for the Reason for Not Applying for a Loan
Source: Author's Field Survey, 2011

Response	Chart	Count	Percentage
Fear of inability to repay the loan		11	85%
Lack of financial documents/lack of pay slip		7	54%
High interest rates and fees		8	62%
Difficult and lengthy procedures		5	38%
Availability of other accessible sources of finance		3	23%
Lack of bank relations		7	54%
Lack of collateral/security		5	38%
Religious beliefs		8	62%
Bad credit history		3	23%
Other, please specify:		4	31%

The table is illustrative of the categorisations of the five Cs: condition, character, capacity, capital and collateral discussed by Karley (2002) of financial institutions that the respondents and financial

institutions use in determining the individual's ability to honour a loan repayment. A high interest rate, all things being equal, leads to a decline in demand for loanable funds. There is no denying the fact that the 26 banks apply the orthodox approach of allocating funds for housing based on "affordability" theory. Bramley and Karley (2005) and Karley (2008) consider housing affordability as the ability of a household to meet the monthly mortgage or rent payment aggregated as a third of the total household income. In Moss (2003), a study of housing finance systems in four African countries of South Africa, Nigeria, Ghana and Tanzania, it was noted that the main problem that eliminated low-income earners from the housing ladder was affordability because of their low income. Bramley (1993) argued that affordability is not only an issue in emerging economies; it has been a requirement that limits access to owner-occupation for new households throughout England.

4.5.3 Financing Mortgage Loans to LMI Groups

Over the 10 years, Ghana's financial system has undergone intensive regulatory reform and restructuring, which has resulted in an increase in credit offered by commercial banks in the country. The financial sector is dominated with 26 banks, 5 of which are foreign-owned and 3 are state-owned. Minority players such as IFC, micro-lenders, mutual and community-based associations also play a role in the supply of access to finance by LMI groups. The largest bank in the country is the state-owned Ghana Commercial Bank which holds about 15 per cent of banking sector assets. The country has one of the most efficient stock markets in the country. As at 2010, the Ghana Stock Exchange had over 35 companies with a market capitalization of more than US$12 billion. Banks have used the stock exchange to raise funds to mortgage lending. For example, HFC Bank has issued and listed six corporate bonds since 1996. Also, recent regulation has allowed foreign investors to invest in securities listed on the stock exchange without exchange control regulations.

Access to finance in the country is still limited across various financial products. According to the MixMarket 360,910 borrowers received a total of US$131.8 million in microloans in 2009. The country has a well-developed microfinance sector that is beginning to make inroads into housing. For example, HFC Bank in collaboration with CHF International offers housing loans ranging up to US$2 000. ProCredit, an MFI in Ghana also launched a housing improvement loan in 2006. Like commercial banking, microfinance suffers from the lack of long term funding. Ghana's pension industry is small with only nine per cent of the labour force being contributors. Ghana has some way to go to create the necessary systems to support mortgage lending although it is registering some progress. The number is also low because supply is limited: there are three major players in the mortgage loan business in Ghana – HFC Bank with 30 per cent of market share, Ghana Home Loans, a specialized lender and Fidelity Bank. Each of these lenders offers a menu of loan products with their own special names which can all be reduced to a variation of five main loan categories:

Table 4.8 Housing Finance Products

Source: Author's Field Survey, 2011

Housing Finance Products	Attributes
Home Purchase Mortgage (HPM)	Home Purchase Mortgage is a loan product designed to assist individuals and companies to purchase residential properties for their own use or for rental. This program is for both first-time buyers and existing homeowners. The borrower is usually expected to make a minimum 15% down-payment and the bank provides a loan equivalent to a maximum 85% of the purchase price. The loan terms are usually 15 years and interest rates on home loans in Ghana are always variable (ARM) interest rates.
Home Equity Mortgage (HEM)	This product is designed to enable borrowers who currently own a home to release the equity in those properties to improve their liquidity position. Individuals or companies who have properties that are either fully paid for or are currently financed, but do have equity, may apply for this loan. The loan proceeds could be used for home improvement, expansion of businesses, paying overseas school fees, buying a car or taking a well-deserved vacation. The maximum loan allowed under this program varies from bank to bank, but the loan term is usually for 15 years and the interest rates are always variable.
Home Completion Mortgage (HCM)	This product is designed to assist borrowers with financing to complete the construction of their homes. These houses could have been started with the borrower's own resources or through financing from their employers, bankers or another mortgage company. The idea is to help bring the project to completion to help the borrower achieve the goal of homeownership. Again, the maximum loan varies from bank to bank but the loan term is 15 years, the maximum loan-to-value is usually 50%, and the interest rate is variable.
Home Improvement Mortgage	Home Improvement Mortgage is designed to assist borrowers with financing to undertake renovation and extension work on their existing homes. The target group for this product is existing homeowners and companies who have properties that need renovation or improvement. This loan product is pretty similar to the Home Equity Mortgage described above, but under this program the proceeds must strictly be used on the existing home.
Construction Finance	Construction Finance is currently offered in three (3) different ways (a) Construction finance to the real estate developer (b) Construction finance to the borrower and (c) Construction finance to the customer of the real estate developer. In all cases this facility will be for the construction of homes. The target market for this product is mainly real estate developers.

Construction Loans from a US Mortgage Banker: Minimum $10 million	Summit Financial & Investment Group, a US mortgage banker, has engaged the services to make loans directly to Ghanaian real estate construction companies with a minimum loan of $10 million. Interest rates on such loans will be strictly US-based interest rates from 6% to 8% and repayment period will be 5 years. The maximum Loan-to-Value on such loans shall be strictly 65%. Loans will be made on projects such as apartment buildings, office complexes, shopping centres and shopping malls, hotels and resorts, and mixed-use properties.

Ghana Home Loans commenced operation in 2006. As of 2009 it had disbursed over 550 loans worth close to US$40 million. Some new lenders are coming into the market, including international banks such as Barclays and Standard Chartered and SG-SSB (Societé Générale – Social Security Bank). These banks, however, tend to lend only to higher income salaried households, bank employees or favoured clients.

In the World Bank's Doing Business Report (2011), Ghana moved up 63 places to the 46th rank (out of 183 economies) with regards to getting credit. The private bureau registry covers only 10.3 per cent of the adult population, receiving 3 points (out of 6) on the World Bank's depth of credit information index. This is as a result of the new credit bureau, Ghana's first, which started its operations last year. A national identification exercise is also underway. These measures are expected to improve the environment to facilitate lending by banks and non-bank financial institutions.

4.5.4 Challenges of LMI access to finance

Access to housing finance by all income groups is therefore important in ensuring adequate shelter for all. Besides, finance is one of the important factors that can ensure that there is suitable housing production that can fill the gap between the current situation of affordable housing that is inadequate and adequate shelter that is unaffordable (UNCHS, 2005). Housing production is capital-intensive and access to continued flow of finance is necessary to ensure both quantity and quality of housing. Formal finance systems (commercial mortgage finance) can provide this continued flow of finance for prospective home owners. This form of finance has been expanding in many countries over the last twenty years and new providers range from commercial banks to mortgage companies, however, access to this form of finance is limited to the middle and high income groups. The LMI groups are ineligible for this commercial mortgage finance because of their inability to meet the demands of formal finance of minimum deposits and regular income streams for long term repayments.

a. Affordability

The average lending interest rate had declined from 27.6% to 25.9% in 2011, according to the Monetary Policy Committee of the BoG. Banks were still charging very high interest rates, despite borrowing at 13.5 per cent from the Central Bank making the cost of borrowing still very high in Ghana. The average house price to income ratios is four to one. Only about three per cent of households can afford the cheapest formal sector dwelling on the market. Loan to Values (LTVs) vary but are all generally not exceptional; HFC Bank lends with an LTV of 80 per cent. Ghana Home Loans has an aggregate LTV of 54 per cent. There are some short terms for loans, as little as six months to two years, although 20 year loans are available. From the survey undertaken, 96% of the low-income earning respondents indicated that they did not access loans for housing from financial intermediaries or institutions; if they did the loan was rather used for the establishment of a business and would rather use their savings and personal cash to buy or build a house. 4% of the respondents who were moderate-income earners and of tertiary education indicated that they had successfully acquired finance from financial institutions. They had obtained the Home Purchase Mortgage, which is subject to the credit profile of the customer. The maximum term for this facility is 20 years for resident Ghanaians and 15 years for non-resident Ghanaians (NRG) with a minimum down payment of 20% for both flexible repayment loans and standard conventional reducing balance loans. Processing fee is at 1.5% of proposed loan for resident Ghanaians and at US$250 or GBP150 for NRG. No facility fee is applicable to resident Ghanaians but a 1% facility fee of the proposed loan is applicable to NRG. A statutory deposit of 2% towards the registration of title and security documents is applicable to both resident and NRG.

The construction of formal housing units is beyond the affordability of the majority; a basic one bedroom semi-detached house costs between US$16 447 and US$30 000 (refer to Figure 4.1 below).

Figure 4.1: Housing Affordability in Ghana
Source: Centre for Affordable Housing Finance in Africa, September 2011

The monthly mortgage repayment will be US$250 a month and requires that the prospective mortgagor be earning about US$750 a month to qualify. CAHF reported in 2010 that in Greater Accra, the average annual household income was US$1 402 or US$115 a month.

Chart 4.6: Distribution of Respondents Indicating Level of Affordability per Income Bracket and per Age Group
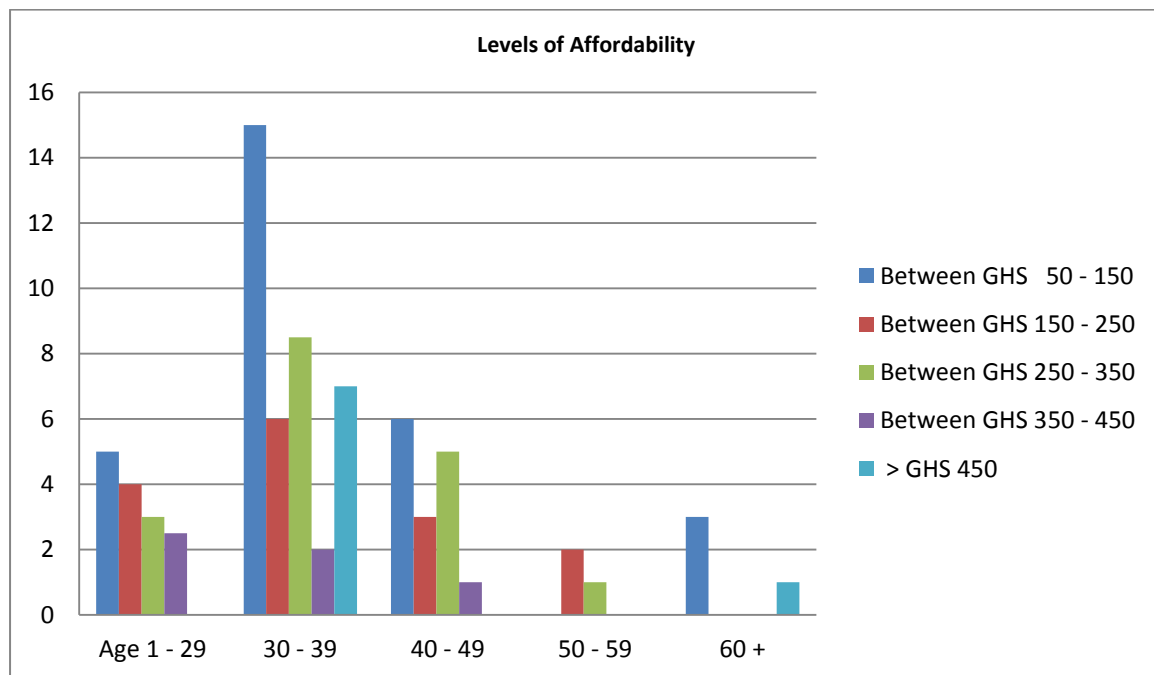**Source: Author's Field Survey, 2011**

Chart 4.6 above categorizes the respondents by age using the income distribution data, to indicate the levels of affordability per age group. The median income levels of affordability between the ages of 1-29 is GHS 250 which makes access to housing loans inaccessible because the respondents do not meet the lending requirements required by the banks to access a loan. Respondents between the ages of 30-39 are in their prime age and median income of GHS 350 whom are likely to acquire loans as confirmed in studies by Haurin, *et al* (1987); Maki (1993); Dusca *et al* (1994); and Bourassa (1995) and Deutsch *et al.* (1995). As indicative of the survey results respondents were reluctant to approach banks because of the high lending criteria required by banks. Respondents between the ages of 40-49 and 50-59 median income reduces to GHS 250 which is still very low to acquire a loan as their household commitments far exceed the repayment commitment of a loan. Respondents over 60 years of age were either on pension with a median income of GHS 250, inherited or built their houses a long time ago therefore were not seeking loans to build or buy house.

According to the World Bank Country Brief report, Ghana has historically suffered a high level of non-performing loans. The government started fulfilling its budget promise to repay outstanding

domestic arrears in the first half of 2011. Domestic repayment to the banking sector and other domestic financing constituted about 55 per cent of outstanding total arrears. Arrears liquidation (through cash payments and bond issuances) aims at reducing the exposure of commercial banks to non- performing loans, strengthening their balance sheets, and restoring utilities ability to operate at full capacity. This has been attributed to a combination of poor "sometimes fraudulent" lending practices, weak management and ineffective loan repayment and follow-up systems (CAHF Yearbook, 2011). 96% of LMI consumers who cannot afford a mortgage usually use their savings to first buy the building materials, followed by a lengthy construction period as money must be raised to finance each stage. Housing microfinance has a limited capacity but the practice is growing gradually.

b. Housing supply

A recent study by UN Habitat (2006b) reports that Ghana's housing need is expected to hit 5.7 million units by 2020. The analysis highlights that housing in the country has never been a significant component of the country's national economic planning, but has been seen rather as part of its welfare sector. As much a 90 per cent of Ghana's housing stock has been produced through self-build. According to the Ghana Real Estate Developers Association (GREDA, 2012), the slow pace of residential property construction is now changing. Since 2005, completions and new building plan approvals have increased from 120 000 to 450 000. Permit approvals for registered real estate developers and parastatal real estate developers have more than doubled from 1500 to 3900. This has not changed the predominant self-build form of housing delivery, however. There is some delivery of some 40 000 housing units by the government. Players include the Social Security and National Insurance Trust and the State Housing Company. Housing developments driven by the state, which primarily targets the public service, have, however, been unable to significantly impact the demand. Over the 10-year period 1991 – 2000, state housing institutions produced less than 40 000 mortgageable units. Private sector players include Rigimanuel Grey, NTHC Properties, Trassaco Estates Development, Lakeside Estate Ltd, Devtraco, Salem Investment, Flexcon and Civil Master Company. They have also not delivered sufficient quantities of housing across income bands there is still a backlog of 1.6 million units. On the 7 December 2010 the Ghana Government and a Korean Construction Firm called STX signed two agreements for the construction of 30,000 housing units as the first phase of a proposed 200,000 units over the next five years 2010 - 2015. Barclays Bank is leading a consortium to finance this project. About half are intended for government employees and the other half for sale to the public.

The Tema Ashaiman Municipal Slum Upgrading Fund (TAMSUF) provides useful lessons for slum upgrading, and integrated development for the poor. Funded in part by UN Habitat, the project is driven by the Ministry of Local Government in Ghana, and two municipalities. UN Habitat provided a grant of US$400 000 as a capital enhancement, and a further $100 000 for administration and development. A further $400 000 capital enhancement grant is expected. Working with People's Dialogue on Human Settlements, the first project involves the development of houses and shops, and ultimately an entire integrated development for the slum dwellers involved. By marking land both for residential and commercial purposes, the project addresses to some extent the competing land uses that often undermine the poor's access to well-located land.

4.6 Summary

The aim of the study is to investigate factors affecting housing finance supply in Accra. However, with the questionnaires completed by LMI groups and housing finance institutions highlighted in the findings that a borrower's income and characteristics such as age, marital status, employment and education are important indicators to differentiate between high risk and low risk borrowers (Deng, et al, 2005). 4% of respondents who were married or in a free union, and are in formal employment with regular incomes aged between 30 – 39 and 40 – 49 respectively could access housing finance from HFC and GHL. Housing finance is not only about extending housing loans but also to mobilize resources for economic growth. A substantial percentage of the respondents have savings accounts with banks but do not use them extensively, same is the case with mortgage institutions. 96% of the respondents between the ages of 30 -50 years who were single, separated or divorced prefer to keep their personal cash than to place the cash in financial institutions for safe keeping because of the high finance charges and interest rates. This practice does not encourage mobilization of resources within the economy.

The context within which the analysis and findings in this research report is situated is one which four key conclusions are drawn from the research questions:

- *Have conventional methods of financing urban shelter captured the groups that need their intermediation?*

One might conclude that 96% of LMI borrowers surveyed fail to approach mortgage institutions to request for housing finance due to various factors. These factors might include cumbersome lender requirements which Ojo (2005) stated as presentation of certificate of occupancy (title deed to land), affordability criteria and repayment criteria. In recent past, no literature has ever considered the contributions of employers of labour in the provision of housing finance.

Since the provision of housing finance by employers of labour is outside the orbit of government policies either monetary or fiscal, it is considered as an informal form of housing finance with cheap cost (low interest rate). This has substantially contributed to the provision of housing finance, at least based on the sample population considered the LMI group refuse to access such alternatives because they prefer to fund their own housing out of their hard earned personal cash or savings refer to chart 4.4.

- *What is the extent of financial intermediation to LMIs?*

From the field survey conducted as shown in Table 4.4, it is observed that 52% of respondents rent accommodation, 28% of respondents own their homes, 16% of respondents live rent free or offer a small monetary offering as a form of good gesture and 4% of respondents live in informal settlements.

Small-scale landlords in both the rental housing and informal settlements are a major source of affordable housing for the growing LMI group living in the AMA; but there are few initiatives to assist them. It is imperative, therefore, to understand how best to assist the informal rental sector and, at the same time, to preserve affordability.

- *What challenges can be identified that determine how LMI earners access urban shelter finance?*

The main constraint for LMI earners to access urban shelter finance as covered in the Literature review is the high cost of housing in relation to incomes. Particularly in urban areas, where land prices are high, the gap between cost of new construction and incomes has some major consequences:

i)   It forces new developments for moderate income households further out of the centre, while most employment opportunities are still located in the inner city areas.

ii)   Only a small proportion of all required houses (roughly 500,000 per year in urban areas alone, GREDA 2005) are built in the formal sector. The private sector builds only for those who can afford to pay. Public housing efforts remain small because required subsidies are deep. While NGOs have housing programs in rural areas, the urban housing problem has been too complex and intractable for NGOs to take on.

iii)   High land prices in urban areas have caused multi-family units to become the predominant house-type. This type of housing makes it difficult for urban middle and low-income households to use traditional incremental land acquisition and house-construction methods. Mortgage finance is a necessity for this group of households to

acquire urban shelter. In rural areas and in informal urban areas incremental single-family house-construction is the prevalent way of house building.

The lack of urban shelter finance exacerbates the problem. The private development sector is interested in building houses for middle income households, which have been underserved until now. NGOs are beginning to make plans for the development of new lower income housing projects in peri-urban areas. Without access to finance, however, a down-market move in the formal housing sector (particularly for multi-family housing) is virtually impossible. In the meantime, informal housing solutions prevail in urban areas, both in the rental and ownership sector.

How can the defined extent of financial intermediation for LMI earners be achieved?

All LMI households that aspire to home-ownership are dependent on their own savings with additional contributions from relatives, friends or employers, or short-term money-lenders. Given the lack of access to finance and the overall low levels of income, informal and non-permanent housing prevails, both in urban and rural areas.

The challenges facing the housing finance sector in the AMA in narrowing this extraordinary gap is the access to housing finance can best be divided in three parts:

i)   How to increase financial intermediation to the number of households that have access to formal construction and mortgage finance to build or purchase a home in the formal urban sector,

ii)   How to extend credit to lower-income urban households that already own a house in the informal sector or could, with special assistance, acquire an apartment or plot but would not qualify for mortgage programs,

iii)   How to enhance and expand LMI lending programs.

The housing finance sector has to show that it can be a profitable investment sector with long-term potential. With the right support and policy changes, the private development and housing finance sector could serve a large proportion of LMI households. Several reforms and innovations were analysed in the literature review and research findings.

The mortgage market can expand its lending operations to LMI households by improving efficiency, mobilizing additional resources for housing lending from long-term investors, and redirecting present mortgage subsidies tied to government programs and institutions to demand oriented programs that can be implemented through the public and private mortgage lending sector. At the same time non-collateralized housing credit can be expanded by the professional MFIs through

increasing access to funds earmarked for housing, reducing the need to provide internal cross-subsidies for housing loans, broadening the target population to rural entrepreneurs and urban lower income households in specific geographic locations and developing more varied professional housing finance products. The combination of these two approaches have the potential to dramatically increase access to credit and housing finance for low and moderate income households, with related improvements in quality of housing in the AMA.

Following the preceding chapters discuss herewith, chapter five, the final and closing chapter summarises the findings of the study from which conclusions are draw to make informed decisions. Recommendations for possible solutions to the problems are presented. A reflection of the reliability and validity of the research findings, research design and methods, and a preview of further research areas are provided.

5. CONCLUSIONS AND RECOMMENDATIONS

"Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."

Universal Declaration of Human Rights (Article 25.1)

5.1 Introduction

Chapter five of the study presents the summary of the research and is divided into eight sections including the introduction. The second section summaries the problem statement of the research work, the third section discusses the research questions that were formulated from the problem statement discussed in chapter one. Section four is the reinstating of the research objectives and the contribution to knowledge. The fifth section presents the main conclusions emanating from the findings of the study and the sixth section highlights the areas of future research and section seven proposes policy recommendations, while the last section presents the conclusions of the study.

5.2 Summary of Study

The challenges affecting housing finance has remained a major constraint for housing delivery to LMI groups in Accra. The main constraints were found to be related to be income affordability, the building costs and lack of finance. The study looked at the state of finance for housing for LMI households in Accra. The analysis confirmed that houses are indeed expensive and out of reach for many Ghanaians. A basic two bedroom unit costs up to GHS80 million cedis while the average income level for LMI households is around GHS 30 per month. Thus the payment to income ratio is too high (over 100%) for traditional mortgage lenders. In addition, the characteristics of the traditional mortgage lender do not suit the conditions that are not easily met by LMI households. High transaction costs and a fluctuating economy make mortgage lending unattractive to both LMI households and financial institutions alike.

Despite these conditions, housing is a basic human need that needs to be provided either by the government or market forces. The biggest challenges to addressing the need for better housing around the world, however, are lack of capital and the unwillingness of large capital sources to get involved in the markets where need is greatest. The problem of housing finance to LMI groups is severe in developing countries like Ghana where, many poor people live in informal settlements on public and private lands. Despite the fact that self-help housing is common for most people, some still cannot afford to build their own house due to the lack of capital. Others can afford their own house construction but within a constraint of financial needs. The study revealed how crucial the

effective provision for technical assistance to the main providers of housing finance is to the success of access to housing finance by LMI households.

5.3 Discussion and Main Conclusions from the Study

The importance of this section is to discuss the fundamental research questions which were derived from the problem statement discussed in chapter one of this study and draw conclusions as it relates to access to housing finance by LMI groups in Accra.

Conventional methods of financing urban shelter

A well-functioning housing finance system is essential in expanding effective demand for housing and improving the housing conditions of a nation (Kim 1997; Quigley 2000 and Warnock and Warnock 2008). Due to apathy shown by borrowers, access to housing finance from the formal sector in most countries of the emerging economy accounts for less than twenty per cent of home purchases, with loans from relatives, employers and moneylenders supplement savings and current income to finance housing and account for between seventy to eighty per cent to housing finance supply (Renaud 1985 and Kim 1997).

36% of the respondents making efforts to raise housing finance were single and in the age bracket of 30 to 59 years. Individuals above sixty years of age are assumed to be nearing their retirement age and do not make efforts to source for housing finance. In Ghana, the literacy level is high and income is low, the monthly minimum wage is GHS 30, though there is agitation to get the monthly minimum wage reviewed. This abnormal does not encourage banking habits. From the study, of the seventy-five respondents that indicated their level of education, sixteen (21.3%) attended institutions of higher learning either vocational/polytechnic or university. This translates to the fact that individuals that are not well educated do not bother sourcing or accessing housing finance from the formal sector. Neither are self-employed individuals that their incomes cannot be easily verified in most cases seldom source for housing finance in the formal sector.

This argument buttress the point raised by Jones and Maclennan (1987 p.206) that it is not only supply for mortgage finance being unable to sustain demand, but that creditworthy households may not seek loan finance to meet up their mortgage finance needs. Instead, the researcher rather established that individuals would rather source finance for loans to start or supplement their business ventures.

Generally, in Ghana, borrowings are considered as taboo and selling one's properties due to loan repayment default is as if an individual has offered the gods and is also viewed as a failure if he has not used his hard earned personal cash or savings to build a house than to source from the formal

sector. From the study, the researcher acknowledges, despite borrowing from employers or moneylenders it is considered as an informal source of housing finance supply, the interest rate is the cheapest at nine per cent none of the respondents indicated they made use of it. Only 36% indicated that they made use of formal sector housing finance as they saw the benefits of sourcing finance in addition to their personal cash and savings. Although, respondents indicated the displeasure of high interest rates they were able to access finance because of their creditworthiness. This is not the case with LMI groups hence they do not bother engaging formal and informal sectors for housing finance.

The depth of financial intermediation to LMI households

The provision of financial services for LMI households has been supported by Non-Governmental Organisations (NGOs) and the donor community in the form of micro financial services over the past three decades. For example, discussed in chapter four of the study HFC Bank offers housing loans in collaboration with CHF International to LMI groups in the form of microloans. Microfinance has been provided usually for enterprise. Between 1980 and 1993, less than three per cent of development assistance went to housing finance and other housing programmes (Satterthwaite, 1995). Micro-finance for housing is defined as the provision of small loans to LMI households typically for self-help home improvements and expansion, but also for new construction of basic core units (Ferguson, 1999). This concept has spread throughout the developing world as a possible solution to housing for LMI households (Kyung-Hawan, 1997; Ferguson, 1999).

Identified challenges to LMI earners accessing urban shelter finance

The levels of affordability discussed and analysed in the findings in table 4.8 discussed above, effective demand for housing is the willingness and the ability of households to pay for housing. It is a function of income and therefore, a potential homeowner's decision on whether to buy, rent or improve their housing conditions is directly related to the following additional factors:

- "Income level and income uncertainty
- The cost of homeownership (e.g. production cost, financing cost and availability, maintenance cost, taxes, absence of rent risk, etcetera)
- Household wealth or lack thereof (indebtedness)
- Life-cycle factors (migrants status, household composition and phase of household development)
- Housing risk (the variation of house-prices overtime)" (Hoek-Smit, 2002).

The measure of the proportion of household income that a household is willing to spend on housing is what is termed as housing affordability. However, other factors like the life cycle, price of housing and financing availability greatly impact on housing affordability of all income groups (Ballesteros, 2002). Therefore, the realization of housing need is dependent on the availability of housing finance which propels the effective demand and affordability.

The defined depth of financial intermediation to LMI earners been achieved

As quoted by the International fund advisor: "When microfinance institutions are providing credit, at some point there's a limit. They can't just keep building up loan portfolios. They'll run out of financial sourcing possibilities. A true financial intermediary is one who intermediates, not only through transactions with customers, but also within financial markets."

For the success of financial intermediation in the Ghanaian financial market, Governments and donors have played a catalytic role when supporting the innovative approaches of alternative financial institutions, with mixed results. These institutions operate in rapidly changing environments. They try to meet the social, economic and political challenges in their economies while serving the needs of those traditionally denied access to financial services. Most countries have a number of these institutions and in some cases all of them are present. The main objective is to empower disenfranchised LMI community members, whichever type of housing finance is established, that the industry especially in Ghana faces. Illustrative of the key financial intermediation depths achieved thus far are the following:

- ▪ Small Step Loans and Incremental Building Process

Hardoy and Satterwaite (1989), and Turner (1972) have stressed the fact that LMI households tend to build in stages. Mitlin further notes that 75% to 90% of people in developing countries build incrementally. Lack of funds and increasing inflation protracts the building time. In Ghana, the incremental building process is not only used by LMI households, but also by high-income households. There are however, some differences as discussed in the findings of the study, that high–income households may have some land from family or bought some time in the past. High-income households, especially those who work in the civil and public services and have received government accommodation, are able to afford the time to wait to build a house incrementally.

Institutions like HFC and GHL have a product called the *'Home Completion Mortgage' (HCM)*. This product is designed to assist borrowers with financing to complete the construction of their homes. These houses could have been started with the borrower's own resources or through financing from

their employers, bankers or another mortgage company. The idea is to help bring the project to completion to help the borrower achieve the goal of homeownership. Again, the maximum loan varies from bank to bank but the loan term is 15 years, the maximum loan-to-value is usually 50%, and the interest rate is variable.

LMI households on the other hand, may not have land and if even they do, may not have the luxury of time to build the house of their dreams and as such tend to build incrementally while living in the building. Microcredit, provides small loans at market rates, but can also be given in steps. It is this staggered-lending feature that can be most adaptable to housing finance for LMI households. In this case a borrower becomes eligible for another and often larger loan when the previous loan is repaid. Each step-loan can be used to finance a particular stage of the house. This is more affordable to LMI households.

- *Market Interest Rates*

Harper (1998) notes that interest rates in developing countries are high because of high inflation. To achieve positive real interest rates with high inflation, then nominal interest rates need to be high. There is no evidence that the poor cannot repay long-term loans. For moderate-income households who receive some stable income, some arrangement can be made with employers to make payments possible. There is a need for research into the collaboration between employer and employee as an aid in housing finance. For the present, it may be the case that both the cost and availability may be an issue for low-income households in need of housing finance. Thus, there may be the need to charge lower subsidised interest rates than that charged by microfinance for enterprise as in the case of the Grameen housing loans where interest rates for housing loans are lower than that for enterprise.

- *Production versus Consumption Finance*

Harper (1998) notes that there is a thin line between what is termed as productive usage and unproductive usage. Housing finance can be seen as consumption finance. The returns from a given loan for a housing project are not immediate. Thus the money to repay the loan must be generated elsewhere. If by owning a house the borrower can save in some way, then the savings can be used to repay the loan. It is not uncommon for the poor to use the loans for consumption instead of production. Some use the loans to repay other debts. Indeed Harper (1998) notes that the differences between production loans and consumption loans are in many ways false. Houses can be used to generate savings. In the case of the Grameen Bank in Bangladesh, the use of tin sheets instead of grass thatch provides a direct financial return, because the cost of the sheets may be no

more than say three times the cost of re-thatching which has to be done every year, whereas sheets last maybe fifteen years. The building of more secure and better quality homes can reduce theft, food loss and, improve health. If the building is used for business, then returns may be more immediate as the income generated through the business can be used to repay the loan. In this way it may be possible to structure repayments on the savings to be made which may result in lower interest rates which would be more appropriate for LMI households who want to finance their housing projects.

- *Collateralisation*

Another feature that can be adopted for housing finance to LMI borrower is the issue of collateral. As mentioned in the literature review, traditional mortgage lenders would require some form of collateral usually the title on a piece of land. Of the sample population surveyed 78% of the respondents lack collateral or security for their loans and that collateralisation is a screening technique. Generally, LMI borrowers, especially in the less developed countries do not have traditional security such as houses that can be used as collateral. This is not to say that they do not have houses or assets. In fact De Soto (2001) noted that the poor usually have equity in their properties but because they were not 'formalised' or they did not own the land, their properties were not acceptable to the banks. However, to get around this problem, joint group lending or joint liability lending has been used as a way of collateralisation. This has been very effective and the borrowers form groups. Those who form groups are effectively separated from those who do not and the former are charged a lower interest rate. The group guarantee model based on peer group pressure, acts as a substitute for traditional forms of collateral, which most of the clients do not have. This has proved successful in increasing average repayment rates and tends to remove credit rationing by lowering interest rates.

- *Mutual Associations*

It appears that community development initiatives in the form of local mutual associations could have create opportunities for decent home-ownership for the masses but from the findings the LMI borrowers were not keen on engaging in this practice as they preferred to use their personal cash and savings. The financial institutions interviewed where in support of well-established mutual associations to overcome obstacles that prevent institutions from financing LMI potential mortgage borrowers. That is to say, if the principles of the underlying operations of mutual associations could be properly adapted to address the main problems associated with the basic requirements for lending (the five C's) discussed in chapter two.

- *Technical Assistance*

Technical assistance is seen as vital to poverty alleviation in developing countries. An integrated approach on the other hand offers credit with other forms of assistance. 'Other forms' of assistance included training, technical assistance, marketing help, and education. Technical assistance for housing for the LMI households includes review and evaluation of home improvement plans and costs, title verification, construction monitoring and the use of progressive payments based on construction inspections (Ferguson, 1999). As mentioned above, the incremental process used by LMI households can result in low quality houses. Just the provision of credit as suggested by the minimalists would not necessarily solve the problem of poor quality houses. To avoid problems such as poor quality houses and the development of slum areas, technical assistance will be required. This may increase the costs of providing the loans and there are issues as to who will pay for and provide the technical assistance. Some institutions require that their client's contract competent local builders and architects and pay for these services, others use Non-Governmental Organisations (NGOs) to provide the technical assistance at a lower cost. Many institutions providing housing loans contract out a construction or architectural firm to train the MFIs credit analysts over a period so that they will be able to assess cases with comparable data (Ferguson, 1999). Some institutions also have a specialised architect on staff to make site visits and review construction plans. Technical assistance is important if housing finance for LMI households is to be successful. The issue of who provides and pays for the increased costs is crucial and needs to be addressed.

5.4 Restatement of Research Purpose and Objectives

The primary objective of this research study was to investigate the challenges for financing urban shelter, to LMI groups in the Accra Metropolis who cannot afford or access finance to purchase affordable and adequate housing units. The study examined the remaining challenges that must be overcome if Ghana's formal housing finance market is to reach maturity or a sustainable approach that encompasses all.

The secondary objectives are:
i.   To examine the methods of financing urban shelter to LMI earners in Ghana.
ii.   To investigate financial intermediation to LMI earners.
iii.   To identify and analyse the challenges to intermediating to LMI earners to access urban shelter finance.

The research purpose and objectives were achieved by analysing data in a mixed research design using the aid of screenshots to empirical literature to illustrate how the researcher used quantitative data as the dominant mixed analysis, wherein the quantitative analysis component is given higher

priority and qualitative data analysis is incorporated to increase understanding of the underlying phenomenon.

5.5 Contribution to Knowledge

Despite numerous factors hindering the development of housing and housing finance in emerging economies, uncountable efforts in terms of research have been descriptive in nature though highly informative (Warnock and Warnock 2008). Also few descriptive studies and lately empirical analysis carried out on housing finance have been in the areas of housing finance demand.

Having identified risk management as a fundamental issue in financial intermediation and housing finance in particular, research efforts have not been made to do empirical analysis of access to housing finance to LMI groups in emerging economies and Ghana in particular. Therefore this research seeks to contribute to the empirical analysis of access to housing finance by LMI groups in the emerging world in an effort to bridge this gap.

The study has resulted in FinMark Trust's Centre for Affordable Housing Finance in Africa requesting to publish my work on completion of the study. To develop a library of data on housing finance systems in specific countries in Africa to enhance understanding of the housing finance value chain in Accra, Ghana, as well as to identify opportunities for FinMark Trust, through the CAHF, to support the development of the sector, for the benefit of Ghana's LMI market segment.

5.6 Limitations of Study

The outcome of a research might be dependent on various factors as analysed by Walker (1997), these factors include the choice of an appropriate research methodology, how reliable the data collected are and the application of appropriate statistical tools, if relevant. The study used Accra as the case study country wherein as in developed economies, there are database's where data could be extracted for research purposes, but in the emerging world, having access to data is always difficult. Having access to information is considered as a rare privilege and when it is available, it is hoarded with the mind-set that it might put the financial intermediary in a privileged position to improve their probability level.

When questionnaires are being distributed in emerging or developing economies, responses are always very low when it relates to information about individuals because tax avoidance is so high in these economies, when a set of questionnaire is requesting for individual's income, the respondents are always very reluctant to answer those questions for fear of being exposed to the tax authorities. It is also assumed that when their true income is declared, it might lead into their tax due being re-assessed and they might be asked to pay higher tax.

5.7 Areas of Future Research

Further research is required for improving affordable housing policy and processes in Ghana. For example, a much greater appreciation of the economies of scale that urbanization offers by developing and promoting a densification policy that would stimulate more innovative and more intensive use of land in or nearby urban centres or in built-up environments. The Ministry of Works and Housing should develop core indicators for rural and urban housing for inclusion in the monitoring and evaluation of the Ghana Poverty Reduction Strategy (GPRS).

Also, the private informal sector is the most significant supplier of low-income housing in the country, and it would be useful to undertake research on and promote the informal building sector with the Ministry of Private Sector Development.

Taking into consideration other initiatives that might be developed, not only by government but also other key players in the housing supply process. Focusing primarily on the following research areas which would contribute to the development of a sustainable demand-driven housing supply and finance system:

- Apply non-conventional strategies for different market segments;
- Promote wholesale lending link between commercial banks and RCBs and MFIs to finance incremental housing throughout the Country;
- Support widespread housing consumer education now not later;

5.8 Recommendations for Developing Sustainable Housing Finance

Most governments on the continent have no clear policy on housing. Most measures taken are on an ad hoc basis and lack depth in research or analysis. Most of the time there is no political will to tackle the problem, as there are so many competing demands on the government. The tendency is for governments to view housing finance from the perspective of their cash budgets and not as development activity with immense spin-offs to the economy. Leveraging public resources to promote private sector participation in housing has been under0utilized.

Ghana could be assisted by the IUHF or AUHF to come out with clear housing policies based on successful models in other countries. Information on best practice and schemes that have worked must be shared by members. The convention should end with clear declarations on a strategy to promote homeownership and assist Ghana to establish well-capitalised mortgage finance companies, whether regulated by banking law or building society legislation.

Compulsory savings schemes and construction of core units on serviced land should be adopted as the best way of promoting a greater supply of low-income housing in Ghana. This will not solve the

problem of funding LMI housing finance but will at least ensure that only serious borrowers who have the ability and intention to pay the loans access the little finance that is available. It will also be an incentive for institutions to raise counterpart funding for housing finance purposes, where the borrower's contribution is at least 10% of the cost of the house. HFC's experience has shown that those who have invested an average of about 40% equity in their own home are good borrowers. Those who have invested the bare minimum of 20% persist in defaulting in their mortgage repayments, but the default rate is still around 3%.

It appears that Ghana is ready for the American concept of different institutions originated and servicing mortgages under the secondary mortgage finance system, which has evolved with 8 banks that were surveyed offering housing finance to the populace with only 2 out of the 8 banks offer housing finance and specialised products to LMI borrowers. There should be more active primary institutions involved in mortgage financing to LMI groups.

Land continues to be a major problem in Ghana, especially in the capital towns such as Accra, where ownership lies with traditional rulers and families, and customary practices make land acquisition difficult. Government should be encouraged to adopt clear land policies and to intervene to acquire land for LMI housing purposes. They should provide basic infrastructure, and then sell the land as serviced plots for housing construction and financing to be undertaken by the private sector. In Ghana, alternatives, such as private and public partnerships have been formed to finance basic infrastructure, which is a major problem in the country. Housing finance institutions in Accra should, in addition to taking deposits, use the capital markets for sourcing additional capital. All the equity and debt instruments issued by HFC and sold on the Ghana Stock Exchange (GSE) so far have been over-subscribed (Ansah, 1999). This should encourage other institutions to try the stock market.

The way forward:

Since, we now live in a world of harsh economic realities, where accessing affordable financing is becoming progressively more difficult, and where external borrowing has become more intensive as these loans have to be repaid in hard currency, it is becoming incumbent for Ghana to look inward to raise financial resources locally for development. The challenge is to provide financing for those with LMI who have a very strong desire to improve the quality of their shelter and are willing to save towards it. However, in view of their low levels of income, mobilizing resources from this segment of the population can only be of limited consequence, if not backed with strong governmental incentives to financial institutions such as savings and mortgage banks.

As no project can succeed without adequate financing, financial resources must be mobilized at both governmental and institutional levels. Some of the ideas that could be considered include the following:

- Creation of more mortgage finance institutions focusing on LMI borrowers and mobilization of savings by inviting would-be beneficiaries to save up front in order to benefit from housing loans;
- Utilization of resources of compulsory savings schemes such as Provident and Pension Fund Schemes (Social Security Funds) which are particularly suitable for housing finance;
- Issuing of housing bonds; and
- Creation of special funds, such as the Mass Housing Fund of Turkey and the National Housing Fund of Nigeria.

Government can also intervene in the housing sector through budgetary allocations, investment directives and reserve requirements, as well as creating a conducive environment for mortgage lending vis-à-vis foreclosure laws and their enforcement. Institutions responsible for shelter provision could be authorized by government to collect a housing levy on all salaries for the establishment of a special Housing Fund. Interested employer institutions and individuals may also save up front with the accounts of the institution to qualify for housing loans.

As accessing available finance by the poor is often difficult, due to conventional loan conditions imposed by lending institutions, alternative conditions, such as guarantees, should be made available to suit the abilities of the poor. To achieve the goal of "adequate shelter for all" requires different approaches to shelter delivery and financing. It needs to acknowledge the fact that LMI households build their own houses progressively over long periods – as long as five to fifteen years (Ferguson, 1999). The world over, many incremental and complementary forms of LMI housing finance are being developed. This displays the creativity of LMI consumers, NGOs and lenders. Such approaches should include:

Firstly, a wide range of low-cost housing solutions is needed. Access to land and security of tenure is the most urgent need for the poor. This means not necessarily fully developed plots with infrastructure, but land that could be developed in due course. Such a process of bringing in infrastructure, after building shelter is the "normal" process for squatter settlements. Governments could learn from this and **plan for the poor** by setting aside land for low-cost housing. The development paradigm for LMI housing should adopt the progressive housing process and support community organization for self-management and infrastructure development.

Secondly, housing finance has to offer small loans at market rates. This could be done through the widely existing **local community-based savings and loan groups**, which have proved that the poor are able to save and use loans and are able to manage such schemes. Finance institutions have to get away from the conventional forms of securing such loans.

Thirdly, Government should design **subsidy schemes for the poorest** in such a way that they really reach the target group. The approach, where subsidies and loans are linked to savings and credit efforts are made and supported in community development. The case of Thailand's Urban Community Development Office is an extremely valuable example.

5.9 Conclusion

Developing countries like Ghana need to design appropriate strategies for increasing access to financial services by all segments of the population. They must also turn their strategies into effective policy measures and implementation plans. This means that multiple stakeholders must work together to design these strategies and determine the best ways to organize their implementation. Such an effort entails the cooperation of the range of governments, financial institutions, civil society organizations, development partners, and the private sector. It requires all stakeholders to ensure that adequate attention is focused on financial inclusion over the long term.

The payoff to a focus on financial inclusion in developing countries is very high. It will enrich the overall financial sector. By increasing the economic opportunities of poor and low-income people, it will help make economic development itself broader, deeper and more inclusive. Shared and sustained economic growth helps support political stability and social progress, but most of all, inclusive development of the financial sector will increase incomes, build financial assets, empower and enrich the lives of millions of households currently excluded from economic opportunity. This is the ultimate objective of this endeavour.

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APPENDICES

Appendix I - Questionnaire for Low and Moderate Income Earners

This questionnaire is a research instrument for my thesis in **"An investigation of financing urban shelter development to low and moderate-income earners in Ghana: A case of Accra"** for the Master Programme in Property Development and Management. This is an academic exercise and all information collected will be treated confidentially and will only be used for the intended purpose.

A. BASIC INFORMATION

Question 1

Name of Community:

- ○ Ga West Municipality
- ○ Ga South Municipality
- ○ Ga East Municipality
- ○ Accra Metropolis
- ○ Ashaiman Municipality
- ○ Adenta Municipality
- ○ Tema Metropolis
- ○ Ledzokuku Krowor Municipality
- ○ Dangbe West District
- ○ Dangbe East District

Question 2

Length of stay in the community:

Question 3

Sex

- ○ Male
- ○ Female

Age:

- ○ 1 - 29
- ○ 30 - 39
- ○ 40 - 49
- ○ 50 - 59
- ○ 60 +

Question 4

Marital status:

- ○ Single
- ○ Married/Free Union
- ○ Separated/Divorced
- ○ Widow

Question 5

Number of household members:

[   ]

B. SOCIO-ECONOMIC INFORMATION

Question 6

What is your level of education?

	complete	incomplete
Pre-primary School	☐	☐
Primary School	☐	☐
Secondary School	☐	☐
Vocational	☐	☐
Tertiary	☐	☐

Question 7

Sector of employment

○ Self Employed/Entrepreneur

○ Permanent Employee

○ Self-employed/Entrepreneur and Employee

○ Piece Jobs

○ Non-contract employment

○ Other, please specify: [   ]

Question 8

○ Trading

○ Manufacturing/Construction

○ Civil Service

○ Agriculture

○ Domestic Worker

○ Other, please specify: [   ]

Question 9

Location of employment

○ Respondent's Home

○ Store/Container

○ Market stall

○ Office/ Construction sites

○ Street (no fixed location)

○ Domestic worker working in employer's home

Question 10

Do you own a house?

○ Yes

○ No

If yes, how did you acquire the house?
[   ]

C. HOUSING HISTORY

Housing Ownership, Tenure and Financing

Question 11

How old is the dwelling in which you currently live?

Question 12

How long have you and your household lived in this dwelling?

Question 13

Type of current dwelling

- ○ Shack in informal settlement
- ○ Backyard shack/room
- ○ Government Housing
- ○ Compound house
- ○ Shack in site and service area
- ○ House in site and service area

Question 14

Type of homeownership

- ○ Own
- ○ Rent
- ○ Live rent free
- ○ Other, please specify:

Question 15

If you OWN, how did you acquire the house?

- ○ Bought the house
- ○ Inherited the house
- ○ Built/constructed house
- ○ Government subsidy

Question 16

If you OWN, what are the available documents?

    ○ Registered Title Deed

    ○ Registered Sales Contract

    ○ Agreement between Parties

Question 17

If you BOUGHT, where did the majority of the funds come from to pay for the dwelling?

    ○ Informal Loan

    ○ Formal Loan

    ○ Remittances

    ○ Personal Cash

    ○ Other, please specify:

Question 18

If BUILT/CONSTRUCTED, how did you pay to build/construct the dwelling?

    ○ Informal Loan

    ○ Formal Loan

    ○ Remittances

    ○ Personal Cash

    ○ Other, please specify:

Question 19

If you DO NOT OWN, your dwelling how did you acquire the dwelling?

    ○ Rent

    ○ Inherit

    ○ Government Subsidy

    ○ Occupied the place

    ○ Look after place

    ○ Live with Parents/Family

Housing Quality

Question 20

How was the house originally constructed?

- ○ Self-Built
- ○ Hired Builder
- ○ Unknown (Not original Owner)
- ○ Developer
- ○ Government built
- ○ Other, please specify: ▭

Question 21

Did you improve/or make changes to your house during the last 5 years?

- ○ Yes
- ○ No

If YES, which of the following changes did you make?

Extra room for household purposes	--- ▼
Extra room to rent or backyard room	--- ▼
Extra room or space for business	--- ▼
Build a kitchen or improve finishes	--- ▼
Build a bathroom or improve finishes	--- ▼
Improve or put on a roof/ceiling	--- ▼
Improve or put in a floor	--- ▼
Paint, plaster or wall repair	--- ▼
Windows	--- ▼
Doors	--- ▼
Internal water/plumbing installations	--- ▼
Connections to an outside power line	--- ▼
Internal electricity/outlet installations	--- ▼
Home registration	--- ▼

Question 22

What was the total cost for all improvements?

[_____]

Question 23

From where did you get the majority of the funds?

- ○ Informal Loan
- ○ Formal Loan
- ○ Remittances
- ○ Personal Cash
- ○ Family contribution
- ○ Employer loan
- ○ Other, please specify: [_____]

D. HOUSING DEMAND

Home ownership

Question 24

Do you own a house?

- ○ Yes
- ○ No

Question 25

Do you currently own LAND for building a house?

- ○ Yes
- ○ No

Question 26

If Q25=NO: How do you plan on acquiring LAND to build the house?

- ○ Purchase Informally
- ○ Purchase Formally

○ Inheritance

○ Government Subsidy

○ Acquire Informally

○ Not affordable

Question 27

If Q25=NO: Do you know how much such LAND would cost?

[   ]

Question 28

Do you plan on buying or building a HOUSE in the next 5 years?

○ Yes

○ No

How do you plan on paying?

☐ a) Informal loan

☐ b) Formal loan

☐ c) Inheritance

☐ d) Government subsidy

☐ e) Personal Cash/Savings

☐ d) Acquisition of Materials

☐ f) Assistance from family members

☐ g) Advance from tenants

☐ Other, please specify: [   ]

Question 29

(If answer to Q28 a) or b), which financial institution granted you a loan? (Give the name of the institution)

[   ]

Question 30

If Q28=YES, do you know how much it would cost to build/pay for the house (not including the land)?

[   ]

Question 31

If Q28=YES, if you took a loan to pay for the house, how much would you be able to pay per month to repay the loan?

[ ]

Question 32

If Q27=YES, who will build your house?

- ○ Hire a builder
- ○ Build it yourself or with family and friends
- ○ Buy a completed house
- ○ Government Subsidy
- ○ Other, please specify: [ ]

Question 33

If Q27=Yes: Would the house be built or bought in the current city you live in or in another city/town?

[--- ▼]

Question 34

If Q27=YES: What type of structure would the house be?

[--- ▼]

E. HOUSEHOLD FINANCIAL STATUS

Contributors/Recipients of Household Finances

Question 35

What is the family structure of the house?

[--- ▼]

Question 36

Is your spouse or (children under 18 years) living elsewhere?

- ○ Yes
- ○ No

Question 37

How many members are in your household/family living in this dwelling (including yourself)?

[   ]

Question 38

How many members in your family living in this dwelling contribute to household income (including the head)?

[   ]

Question 39

How many members in your family living elsewhere contribute to the household income?

[   ]

Question 40

Current Household Income per Month

- ○ Between GHS 50 – 150
- ○ Between GHS 150 – 250
- ○ Between GHS 250 – 350
- ○ Between GHS 350 – 450
- ○ > GHS 450

Question 41

Specify the amount you spend in a month on the items listed in the table below:

Rent [   ]

Electricity [   ]

Water [   ]

Telephone [   ]

Transportation [   ]

Food [   ]

Medical [   ]

Clothing [   ]

School Fees [   ]

Loan Repayment (if any) [   ]

Question 42

In Q40 (expenses), do you receive any contributions from family members?

○ Yes

○ No

If YES, how much contribution do you receive in a month?

[   ]

Do you have any additional sources of income?

○ Yes

○ No

F. LOAN USE

Question 43

Would you ever apply for a loan?

○ Yes

○ No

If yes, what do you require in order to access a loan from a bank?

[   ]

Question 44

What do you think about the interest rates being charged by the bank?

[   ]

Question 45

Do the interest rates scare you from borrowing from the bank?

[--- ▼]

Question 46

Do you find it tough paying back the loan?

[--- ▼]

Question 47

Does the high interest rate affect your ability to borrow money for a housing loan?

[--- ▼]

Question 48

What are some of the effects of the high interest rates on your ability to borrow money for a housing loan?

[text area]

Question 49

Have you been assisted by any of the financial intermediary institutions (Susu, Savings collectors, Community Associations, Pension, etc.)?

[--- ▼]

Question 50

If yes, what type of benefit or assistance did you get?

[text box]

Question 51

Did the bank follow up to have a look at the activity you took the facility for?

○ Yes

○ No
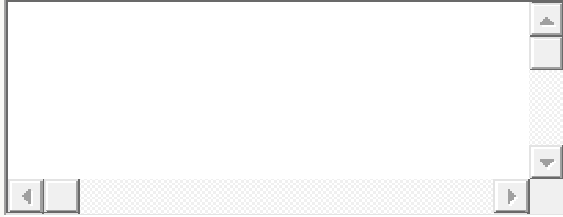
Question 52

Was the loan facility used for its intended purpose?

○ Yes

○ No

Question 53

What role do you think financial intermediaries play in your community?

[text box]

Question 54

Do all kinds of people get housing loans from financial intermediaries?

○ Yes

○ No

Question 55

Does it take several days or weeks for you to process or access a loan from a bank or financial intermediary?

○ Yes

○ No

Question 56

On average how many days does it take to secure a loan?

[text box]

Question 57

What impact does financial intermediation have on your community considering that banks will not borrow money to people like yourself?

[text box]

Question 58

What other strategies do you think should be implemented by both banks and financial intermediaries to help low and moderate-income earners in acquiring housing loans?

[text box]

G. FINANCIAL SERVICES HISTORY AND DEMAND

Household Savings and Deposits

Question 59

Does the head of house hold have any formal bank accounts (which may include checking or savings accounts)?

    ○ Yes

    ○ No

How many accounts do you have with the financial institution?

[text box]

Question 60

Did you use this formal bank account(s) in the last 30days?

    ○ Yes

    ○ No

Informal Groups

Question 61

Do you have any financial scheme in your community?

    ○ Yes

    ○ No

Question 62

What were the difficulties and the effectiveness of the financial scheme?

Question 63

Does anyone in the household make contributions to informal groups (like Susu, Savings Club, and Credit society)?

- ○ Yes
- ○ No

Question 64

The number of informal groups, that members of the household currently participate in:

Number of members in the most significant group [ ]

Number of women members in that group [ ]

How many months has the group been in operation? [ ]

Number of contributions per month from the household [ ]

Average amount of contribution each time [ ]

Average ANNUAL payout amount [ ]

Other Household Income

Question 65

Are you safekeeping funds with an individual intermediary (money keepers/susu)?

- ○ Yes
- ○ No
- ○ Other, please specify: [ ]

Question 66

What is the average amount (GHS) per contribution, contributed over the past 12 months for safekeeping?

[ ]

Question 67

Do you make contributions to a Pension Fund?

- ◯ Yes
- ◯ No
- ◯ If so, please specify: [ ]

Question 68

Do you receive remittances from a family member?

- ◯ Yes
- ◯ No

Question 69

How much (GHS) did you receive over the past 12 months?

[ ]

Question 70

Do you make any other transfers? (Through any Bank, Western Union, etc.)

- ◯ Yes
- ◯ No

Informal Loans

Question 71

Have you ever REQUESTED money from an informal source that you had to pay back (informal loan)? (Friends/Colleagues/Family/Informal Moneylender)

- ◯ Yes
- ◯ No

Question 72

If Q71=YES, which source did you most often request a loan from?

- ☐ Employer
- ☐ Friends/Neighbours
- ☐ Family
- ☐ Moneylender (intermediary)
- ☐ Other, please specify: [   ]

Question 73

If Q71=YES, was the request for a loan accepted?

- ○ Yes
- ○ No

Question 74

If Q71=NO, what was the reason why they rejected your request for a loan?

[   ]

Question 75

If Q71=YES, Number of informal loans borrowed during the past 12 months

[   ]

Question 76

If Q71=YES, Total value (GHS) of all informal loans borrowed during the past 12 months

[   ]

Question 77

From which source did you borrower?

- ○ Employer
- ○ Friends/Neighbours
- ○ Family
- ○ Moneylender (intermediary)
- ○ Other, please specify: [   ]

Question 78

Days between informal loan request and disbursement

[   ]

Question 79

Total informal loan amount

[   ]

Question 80

Maturity (Time period over which informal loan is repaid), months

[   ]

Question 81

How much Security/Collateral was offered for informal loan (value as % of loan amount)

[   ]

Question 82

What was the main purpose of the informal loan?

○ Business

○ Home Improvements/Repairs

○ Home Purchase

○ Other Personal Reasons (Funeral, Emergency, Medical, Transportation, Education, Wedding, etc.)

Formal Loans

Question 83

Have you ever applied for a loan from a bank, government, intermediary, susu?

○ No

○ Yes, but was rejected

○ Yes, was approved but did not take it

○ Yes, and I took it

Question 84

If Q83=NO, what was the reason for not applying?

- ☐ Fear of inability to repay the loan
- ☐ Lack of financial documents/lack of pay slip
- ☐ High interest rates and fees
- ☐ Difficult and lengthy procedures
- ☐ Availability of other accessible sources of finance
- ☐ Lack of bank relations
- ☐ Lack of collateral/security
- ☐ Religious beliefs
- ☐ Bad credit history
- ☐ Other, please specify: ☐

If NO, never applied for a Formal Loan, skip to Q104

Question 85

If yes, and rejected, give the reasons for rejection of loan approval?

- ○ Lack of collateral
- ○ Lack of financial documents/lack of pay slip
- ○ Lack of bank relations
- ○ Business not registered
- ○ Bad credit history
- ○ Other, please specify: ☐

Question 86

If yes, and was approved but did not take the loan, reason for refusal:

- ○ Fear of inability to repay
- ○ Other credit more preferable
- ○ Other, please specify: ☐

Question 87

How many loans from a formal institution have taken in your own capacity?

☐

Question 88

Are you currently repaying any formal loans?

○ Yes

○ No

Question 89

If more than one loan, from how many institutions?

[   ]

Question 90

Total value of all formal loans borrowed during the past 3 years (GHS)

[   ]

Question 91

From which specific institution did you get the loan?

[   ]

Question 92

Type of loan:

○ Minor Home Improvement Loan

○ Major Home Improvement Loan

○ Home Completion Loan

○ Connection to Basic Services Loan

○ Employer-Based Loans

○ Land Acquisition Loans

○ House Purchase/New Construction Loans

○ Pension-backed Loan

Question 93

Days between formal loan application and disbursement (Time from application until loan was received)

[   ]

Question 94

Amount of loan requested (GHS)

[   ]

Question 95

Amount of loan approved (GHS)

[   ]

Question 96

Amount of loan received (minus fees and up-front interest) (GHS)

[   ]

Question 97

Maturity (Time period over which informal loan is repaid), months

[   ]

Question 98

Number of installments

[   ]

Question 99

Amount per installment

[   ]

Question 100

Interest charges (including fees)

[   ]

Question 101

Type of Collateral/Security provided:

- ○ Building, House or Flat
- ○ Land
- ○ Inventory
- ○ Bank account
- ○ Guarantor/Co-signer
- ○ No collateral/security
- ○ Business license
- ○ Pension
- ○ Other, please specify: [   ]

Question 102

Collateral/security value as a percentage of loan amount(%)

[   ]

Question 103

Of the total value of all formal loans, what percentage was used for improving or buying/constructing a house (%)

[   ]

Potential Demand for Formal Loans

Question 104

Do you have interest in requesting a new loan from a formal lender (bank/intermediary)?

- ○ Yes
- ○ No

Question 105

Would you prefer to take a loan from a bank or an intermediary?

- ○ Formal Bank
- ○ Informal Bank (Intermediary)
- ○ No Preference
- ○ Other, please specify: [   ]

Question 106

What loan (GHS) amount would your request?

[   ]

Question 107

Would you use the loan for the following purposes?

- ○ Business
- ○ Personal
- ○ Housing
- ○ Other, please specify: [   ]

Question 108

If Business loan:

How much would you use for a BUSINESS loan? [ ]

How long would you to take to repay the BUSINESS loan i.e.(Maturity)? [ ]

Question 109

If Personal loan:

How much would you use for a PERSONAL loan? [ ]

How long would you to take to repay the PERSONAL loan i.e.(Maturity)? [ ]

Question 110

If Housing loan:

How much would you use for a HOUSING loan? [ ]

How long would you to take to repay the HOUSING loan i.e.(Maturity)? [ ]

**If answered "Yes" to Q104, then Q111-114 must be completed **

Question 111

What is the amount of the installment you are willing to repay per month for the total loan (housing+business+personal)?
[ ]

Question 112

What interest rate are you willing to pay?
[ ]

Question 113

How much in handling fees are you willing to pay?
[ ]

Question 114

What collateral/security would you be able to provide:

○ Building (house/flat)

- ○ Land
- ○ Machinery
- ○ Salary
- ○ Bank account
- ○ Household Furniture
- ○ Jewelry
- ○ Guarantor
- ○ Pension
- ○ Other, please specify: [   ]

** If answered Q104=NO, then must answer Q115 **

Question 115

If NOT, interested in a housing loan, please indicate the reasons why?

- ☐ Content with current housing
- ☐ Will probably borrow money elsewhere
- ☐ Want to save up and pay cash
- ☐ Waiting for government subsidy
- ☐ Do not want to risk losing house or pension
- ☐ Other, please specify: [   ]

END OF QUESTIONNAIRE
THANK YOU

Appendix II - Questionnaire for Formal and Informal Financial Institutions

This questionnaire is a research instrument for my thesis in **"An investigation of financing urban shelter development to low and moderate-income earners in Ghana: A case of Accra"** for the Master Programme in Property Development and Management. This is an academic exercise and all information collected will be treated confidentially and will only be used for the intended purpose.

Name of Institution:

Name of interviewee:

Position in the organization:

Date and time of interview:

Question 1

When did your institution start operating as a business entity?

Question 2

How many products are you currently implementing?

Question 3

Who are your target group(s)?
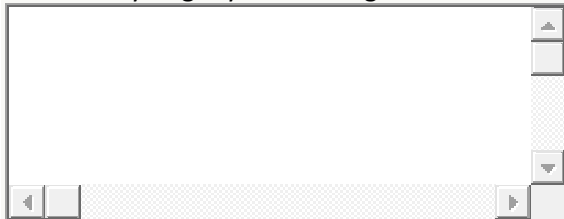
Question 4

Which areas in Accra do you operate your business?
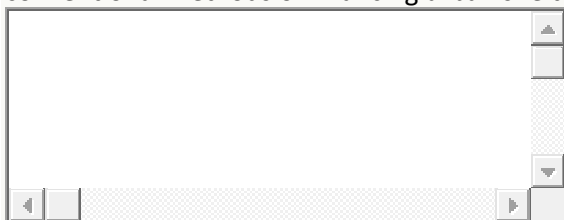
Question 5

Where do you get your funding from?

Question 6

How different are your products in providing loans to the unbanked market as compared to the conventional methods of financing urban shelter?

Question 7

How many clients do you currently serve?

Question 8

In your opinion, does this programme meet the needs of the target group?

Question 9

For clients who are on the programme financial aid scheme for housing, what are your loan terms and conditions?

Question 10

Since the start of the programme, how many target clients have you served?
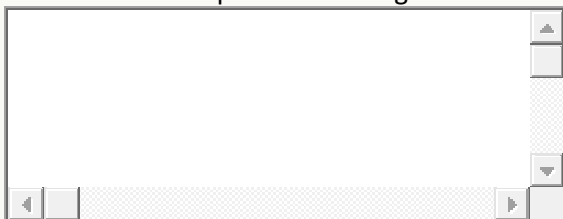
Question 11

Do you have plans of introducing new products or programmes to further capture the unbankable market?

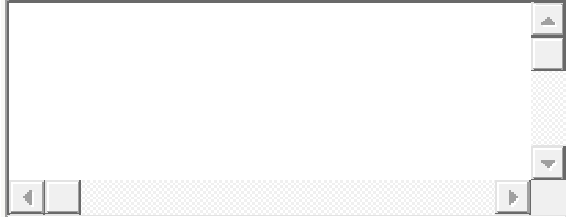|	0	1	2	3	4	5	6	7	8	9	10	
Not at all Likely	○	○	○	○	○	○	○	○	○	○	○	**Very Likely**

Question 12

What do you perceive to be the risks/constraints of institutions like yourselves acting as financial intermediaries to provide housing financial services in Accra to the unbankable market?

Question 13

What have been the critical factors in sustaining your institution?

```
[ text area ]
```

Question 14

Do you receive any support from Government, communities or external parties?

```
[ text area ]
```

Question 15

What do you think are the reasons why clients support this scheme more than your formal financial institutions?

```
[ text area ]
```

Question 16

Which suburbs in Accra do you operate in to provide housing financial services?

- ☐ Ga West Municipality
- ☐ Ga South Municipality
- ☐ Ga East Municipality
- ☐ Accra Metropolis
- ☐ Ashiaman Municipal
- ☐ Adenta Municipal
- ☐ Tema Metropolis
- ☐ Ledzokuku Krowor Municipality
- ☐ Dangme West District
- ☐ Dangme East District

Question 17

What criteria do you use to identify this target group, and if so do you think it is a true representation of access to all groups requiring housing loans?

Question 18

Could you explain the process (steps) involved in accessing the various housing financial products offered by the scheme?
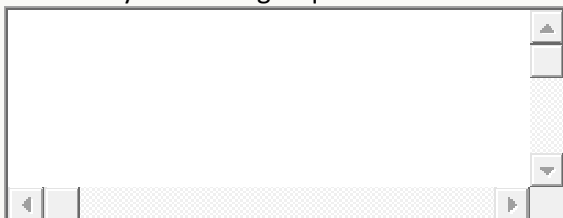
Question 19

How long does it take on the average to disburse a housing loan to individuals or groups?

	0	1	2	3	4	5	6	7	8	9	10	
Not very Quick	○	○	○	○	○	○	○	○	○	○	○	**Very Quick**

Question 20

What are your lending requirements?

Question 21

What are the eligibility criteria for accessing/support of the various housing financial products?
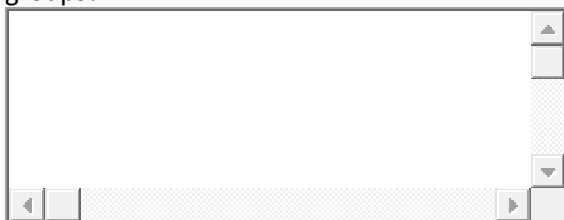
Question 22

What do you consider to be the major risks in providing housing financial products in Accra?

Question 23

Could you explain the constraints your organization faces in delivering finance to individuals or groups?

Question 24

Does your organization provide technical assistance to individuals or groups requiring housing financial products? If so what type of assistance is offered?

- ○ Yes
- ○ No
- ● Please explain:

Question 25

What strategies have you put in place to minimize the risks of tenure security and loan defaults?

Question 26

In comparison with other housing financial products provided by formal financial institutions, what are the distinguishing factors that set your product out of the crowd?

Question 27

What are your perceptions of the future of housing financial products in Ghana for low and moderate-income earners?

END OF QUESTIONNAIRE
THANK YOU