KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

EXPLORING MORTGAGE FINANCING IN THE HOUSING SECTOR OF GHANA

BY

Prosper Osei Agyemang (BSC. Administration in Accounting)

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Of

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DECLARATION

I, Prosper Osei Agyemang do here declare that this thesis is resulted of my own research effort except for reference to other authors' work which have been dully acknowledged. I also declare that, none of the material contained in here has been presented either in whole or in part for any degree elsewhere. I understand that plagiarism constitute a breach of Kwame Nkrumah University of Science and Technology regulations and are dealt with accordingly.

Prosper Osei Agyemang	……………………….	…………………
Student Name & ID Number	Signature	Date

Certified By:

Dr. Dadson Awunyor – Vitor	……………………….	…………………
Supervisor's Name	Signature	Date

Certified By:

Dr. Daniel Domeher	……………………….	…………………
Head of Department	Signature	Date

ABSTRACT

The study explored the mortgage financing in the housing sector of Ghana. With the current effort at social and economic development by Third World countries, a study like this is significant, as it is capable of contributing to the present knowledge in the area of mortgage financing. The populations for this study were made up of workers from formal sectors who qualified to access mortgage loan and mortgage providers. Primary data source was employed. It was found that mortgage financing largely depends on social and financial factors. These two factors have positive correlation with the mortgage performance with the formal explained most of the variations in mortgage performance. Some of the mortgage options identified were residential property for personal use or rental and mortgage for buy, build and own a home. The study also identified high interest rate, high inflation rate and low income levels of workers as some of the challenges facing the industry.

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Almighty God richly bless you all.

DEDICATION

This thesis work is dedicated to my Beloved Wife, my family and my unborn child.

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CHARPTER ONE

INTRODUCTION

1.0 Background of the study

A safe house is one of the fundamental requirements for human survival notwithstanding food sustenance and clothing (Oyedokun, 2013). Housing remains as the basic provision in the human development particularly for those in the third world Countries. Most developing countries are lacking behind in terms of housing delivery and this has led to disaffection for most governments in the developing world. Most governments particularly those in Africa are not able to provide decent housing to their people because of high population growth, fast urbanization, and low income levels. This is also due to bad land tenure system which has been the problem of most countries in Sub-Sahara Africa.

The problems of housing in the world are a numerous but the common one that has been identified according to United Nation Habitat report (2011) is financing. Most countries especially those in Africa, have withdrew public funds for housing delivery and this has been identified as one of the problems facing housing delivery as the private sector alone cannot deliver all the housing needs of the ever increasing population. These circumstances have led to many people paying huge sums of money to rent rooms enhance mounting a lot of pressure on the few houses in the urban communities. Landlords have also taken advantages of this situation demanding huge rent advance. According to Unite Nation Habitat report (2011), Ghana is facing a problem of overcrowding in its urban centres and this has led to a number of slum

(ghetto) settlements.

Housing is exceptionally fundamental and key commodity, it contributes exceedingly to human pride and serves as secure venture. Usually, owing a house in Ghana particularly in in Accra, for example, Cantonment, Sprinters, East Legon, and so forth is a prestige and shows one economic wellbeing (Oyedokun, 2013).

Financing a house has gotten little consideration throughout the years for Ghanaians because of huge sums of money involved in obtaining a house. Government responsibility of providing housing to the masses is now been played by the average Ghanaians whose take home pay cannot take him/her half way through the month. Numerous families can't bear to construct their own houses and depends largely on rent. The informal ways of financing a house in Ghana has been with us since independence. The conventional strategy for home financing is when individuals have to work all through their lifetime, save little from his or her salary for each month for a number of years or depends on other family members leaving in abroad in other to amass funding to build a house. The government of Ghana through many initiatives have attempted to save the housing situation in the country but to no a vile. In 2008, the government at that time started affordable housing project just to help formal sector workers to have access to affordable housing but it was short leave as due to change of government. The new government also tried to put up some affordable housing for the services personnel and other workers but it did not see the light of day. Before, housing financing was left in the hands of Social Security and National Insurance Trust (SSINT) and Bank for Housing and Construction, the formal came out with some affordable houses however, this policy did not leaved long since most people were not paying for others to enjoin. This habit affected workers pension and the policy has to be put on hold. However, the Bank for Housing and Construction that was set up by Ghana's first president to provide funds for housing has to be sold to private entity since it was not able to undertake it core function of providing funds for housing financing.

In the advance world, mortgaging is the source of financing housing. It has been developed in such a way that people can finance housing with ease. The HFC Bank is a bank in Ghana which has expertise in mortgage financing and they are doing so well with the support of other commercial banks who also give loans to both informal and formal sector workers just to build a house that they can call their own. Another group which is also doing well in the housing sector of Ghana is the real estate developers. Mortgage financing is not a new concept that has been introduced in Ghana but the idea is still new in the psyches of numerous individuals because of insufficient data about mortgage (Yarty, 2012), thus just a few individuals are exploiting this option.

Basically, mortgage financing might be the great idea of housing financing and could be the best answer for housing issue in Ghana now. A number of countries have developed their mortgage financing system and they are now benefiting from it immensely example is United State of America and the United Kingdom. Considering mortgage financing in the economy of Ghana can help people to secure financing for housing in Ghana. This study therefore is to investigate the mortgage financing option in Ghana. This will help give information on mortgage system in Ghana and also provide other forms of mortgage option available to people in the formal sector of Ghana's economy.

1.1 Problem statement

Financing a house in Ghana is more costly taking into consideration the low salary levels of numerous family units. Clearly, governments of Ghana for so many years now have demonstrated little sympathy toward building houses for the masses (Oyedokun, 2013). Hence, most households keep on relying on unconventional way of financing a house. This prodigy has created tremendous gap in housing sector of the nation. The housing deficit continues to increase and the present housing deficit figure in Ghana is 1.7 million (Dauda, 2013). This large deficit in the housing sector is as a results of financing problem as well as the government inability to commit more resources into that sector. The home loan fund or the mortgage finance system has impelled a number of developed nations in taking care of their housing issue. The idea of mortgage financing is not well developed in Ghana because of the predetermined number of financial institutions, who are engage in mortgage financing, estate developers' lack of information on mortgage financing system and need subsidizing. The study is to investigate the mortgage options accessibility in the housing economy, distinguish the observation individuals have on mortgage financing in Ghana, challenges confronting mortgage financing and innovative way to deal with mortgage or home loan financing.

1.2 Objectives of the Study

The main aim of this study is to examine mortgage financing in the housing industry of Ghana. The specific objectives are:

i. To evaluate the mortgage financing options in the housing industry of Ghana.

ii. To assess factors influencing the utilization of various mortgage options available in the housing industry.

iii. To find out the key challenges confronting the mortgage financing in Ghana.

1.3 Research Questions

The study tries to discover answers to the following research questions:

i. What are the home loan or mortgage financing options in the housing industry?

ii. What are the factors influencing the utilization of home loan or mortgage financing in the housing industry?

iii. What are some of the challenges confronting the provision of mortgage in the housing industry?

1.4 Significance of the study

A lot research work have been done on housing financing however, much of it have concentrated on Western world and some part of Asian. Consequently, the significance of this study lies in providing an information on how the developing world can take advantage of what has been practiced successfully in the developed countries on housing financing. In addition, the findings of this would shape a premise for future empirical studies.

With the present effort at socioeconomic advancement by Third World nations, a study like this is huge, as it is fit for adding to the present information in the territory of mortgage financing, which might be a results for strategy issues and improvement programmes in the housing sector. The operational importance of this research work lies in the way that; commanding voices in the housing sector of the economy will have a tendency to be more oriented towards this advanced technique for financing a house and search for financial establishments coordinated effort to help improve the sector.

1.5 Methodology

The study embraces cross – sectional study research plan for data collection through organized self-administered instrument called questionnaire. This is because the study aims at gathering various responses from a number of respondents. The population for this study will involve formal sector workers who qualified to access mortgage loan and all real estate developers in Kumasi Metropolis. These groups will be selected based on their accessibility when it comes to administering of the questionnaires. The sampled technique to be used are convenience sampling method. The researcher will ensure that the demographic features of the respondents reflect the true picture of the population of the study. The main advantage is that the study will includes many socio-economic, demographic and perceptional variables, so multivariate analysis and multiple linear regression models will be used to determine the effect of exploring mortgage financing in the housing sector.

1.6 Scope of the Study

This study focuses mainly on exploring mortgage financing option in the housing sector of Ghana. The study only delimits itself to the options of mortgage financing in Ghana, factors influencing mortgage financing in Ghana and challenges facing the provision of mortgage loan in the housing sector of Ghanaian economy. In this study, the researcher will gather statistics on selected real estate companies and workers in the formal sectors in Kumasi Metropolis on mortgage financing. It seeks to focus on exploring mortgage financing in the housing sector.

1.7 Limitation of the study

Every study has its own limitations and this study is not a special case. In spite of the fact that the study plans to accomplish its set objectives, there were some unavoidable limitations or restrictions. The study will assess the mortgage finance option in the housing sector without considering the standpoint of the financial institutions on the mortgage financing in Ghana. Another limitation is in the area of the appropriateness of the research methodology used. Time constraint and financial standpoint on the side of the researcher also impeded the progress of the study.

1.8 Organization of the Study

This research work has been subdivided into five chapters. Chapter one provides information about the background of housing financing, problem statement and other subheadings. The second chapter discusses relevant but related literature on the topic. The third chapter addresses the issue of research design, population of the study, sample size and sampling method, and data collection instrument used. The chapter four was about the data analysis and the discussion of the findings. The final chapter which is the chapter five presented the conclusion and the recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the relevant but related literature on the mortgage financing option such as the housing situation in Ghana, mortgage financing in Ghana and other related headings.

2.1 Ghana's Housing situation

Ghana's population is about 26.7 million of which majority of the population live in the urban centers and the housing stock is approximately of the country is 3.4 million (Population and Housing Census report, 2010). The report further showed that there are more houses in the rural areas (57.7%) as compared to the urban areas (42.3%). The urban areas may have relatively good structures as compared to the rural areas but the better natural conditions in the rural areas cannot be compared to that of urban areas with growing slums (Karley, 2002). The United Nations report on housing indicated that housing situation in Ghana is growing from worse to crisis. The growing deficit in the housing delivery according to Ademiluyi (2010) should be attributed to the control population growth which is hindering the progress of the developing countries. He also contended that shortfall in the housing delivery could also be attributed to migration and low income levels of the working population. The circumstance is not unconventional to Ghana alone but rather reflects the comparative position in numerous other developing nations in the sub-Sahara Africa. Developing nations including Ghana are not sufficiently proactive to conquer the difficulties; as the number of houses needed keep on growing year after year with governments not having ideas as to how to salvage the situation.

As was indicated in the study by Duada (2013), the yearly housing unit needed in Ghana stood around 120, 000 and the country is producing only 40, 000 unit yearly which is woefully in adequate. This circumstance if not checked could disable the housing market in the coming years. The housing challenge in Ghana is essentially connected with absences of financial backing as housing requires immense capital venture (Moss, 2003). A number of individuals don't have enough asset to fabricate and purchase houses because low income levels (Karley, 2002). To overcome the situation, there ought to be an option to deal with housing financing in Ghana, one such option is mortgage financing which could boost housing delivery in the Country.

2.2 Mortgage Finance in Ghana

The mortgage or home loan market in Ghana began in the nineteen fifties when the government set up First Ghana Building Society (FGBS) to give mortgage credit. The Society operations was established through direct government intervention and government was giving loans through the Society to the general public to finance housing. Bad economic management and political instability in the country in the past brought about the housing market in Ghana to its knees (Moss, 2003).

The general public loss of trust in the banking sector due to high interest rate charge by the banks combined with high inflation and high exchange rate have worsen the situation. Banks on the other hand have also raise their interest rate due to high risk involved in giving loans to individual. Individuals decline to save at the bank and consequently contrite banking establishment to raise funds and give mortgage financing on sustainable basis. In the past financial institutions such as Social Security and National Insurance Trust, the defunct bank for Housing and Construction and the State

Insurance Corporation were offering mortgage loans but due to high cost of borrowing and unfavorable economic situation in the country hampered their progress hence them leaving this function.

There are few mortgage institutions; their effect in the business is constrained as their operations advantage just those customers with high net income (Bog, 2007). The circumstance is making mortgage financing costly and unattractive to the large population (Donkor-Hyiaman, 2013). Today, most people cannot afford the mortgage options provided by some financial institutions due to same reasons as provided in the past. The Ghana home finance limited (HFC) is commanding the mortgage or the home loan industry in Ghana giving variety of financing on manageable basis to its customers. The HFC Ltd was set up to work as an auxiliary mortgage institution offering more sustainable housing financing items with backing from the government (Moss, 2003). Real estate developers are also contributing to the home financing applying the mortgage models. Notwithstanding, Donkor-Hyiaman, (2013) insists that, the mortgage portfolio of the two players in the mortgage market that is Ghana home loans and HFC bank remained at US$65 million and US$ 7.57 million in 2011 respectively. This contributes about 0.5% of the mortgage ratio to Gross Domestic Product (GDP) in Ghana. This is far inadequate as compared to mortgage to GDP ratio of both United Kingdom (85%) and United State of America (77%). This recommends that the mortgage industry in Ghana is growing at a lower rate done it was expected and its needs expertise and capital injection.

2.3 Types of Mortgages

There are a number of mortgage systems but the common once are the fixed rate mortgage and the adjusted rate mortgage.

2.3.1 Fixed rate mortgage

The fixed rate mortgage is when the borrower is charged a fixed interest rate for loan throughout the time of repayment. The monthly installment remain the same for the term of the mortgage no matter what happens to the market in terms of fluctuation in the interest rate. According to McDonald and Thornton (2002), interest rate paid on loan remained the same in the loan period. A 20-year fixed rate home loan is example.

2.3.2 Adjustable rate mortgage

The adjustable rate mortgage is a mortgage system where repayment is subjected to variations in the premium the borrower needs to pay to the money lender due premium fluctuates over the term of the loan. The premium charge or the interest rate charge is not fixed but it is based on the risk in the financial market.

2.4 Significance of mortgage financing

Mortgage financing is vital to borrowers, investors and in addition the economy in various ways:

- Mortgage financing promote housing financing and enhances the environment it operates. To Oyedokun (2013), housing serves as wealth creation for low income earners and it also contributes to poverty reduction.
- Chiquier and Lea (2009) clarified that mortgage gives great security. Furthermore, mortgage is the lower-cost means that families can obtained loan to finance their housing projects.

- Mortgage improves investment. Housing financing providers including institutional financial specialists, for example, mutual funds, pension funds and insurance institutions used mortgage financing to improve returns on their investments and differentiate their investment opportunities.
- Herzog (2009) contended that mortgage financing helps to reduce youth unemployment because of stagnation it creates in housing development and also indirectly create employment in areas such as brokers, mortgage lenders and insurance institutions.
- Mortgage funds give individuals the chance to achieve their dreams of having nice houses and have the option to pay for in flexible terms.

2.5 Sources of Mortgage Funding

The wellsprings of finance principally originate from the mortgage organizations.

a. Retail Deposit

   Tuma (2006) asserted that mortgage institutions depends large on retail deposits to fund long term mortgages.

b. Financial Market

   Taylor (2004) examined the history of American mortgage system and its interconnection with international circles and found that the United State mortgage system gives numerous alternative to borrow than anyplace. They had varieties of source including syndicate fund, the capital market, mortgage institutions with insurance sureties and government supported securities as compared to the third world countries where the industry is not well developed. The government of South Africa through legislation had attempted intensely to institutionalized the mortgage industry in the housing sector of that country but the respond is not all that good (Moss, 2003). This is not working because the banking sector still see the mortgage market as highly risk environment. In any case, viable housing fund exists for the middle and upper salary workers.

In Ghana, mortgage finances are generally sourced from the mortgage organisations. Be that as it may, today some mortgage finance institutions are doing same. Chiquier and Lea (2009) indicated that there is a developing concerned about different types of financing beside the residential mortgage including developer fund and microfinance for housing. The developer fund is a free development installment by purchasers, and developers give long term funds to purchasers through installment deals when mortgage markets are not available. The microfinance for housing is for home development, loans are normally endorsed without promising properties. The BoG (2007) indicated that mortgage financing organization are few making mortgage financing option restricted. The conventional mortgage or home loan lenders in Ghana offers comparable products.

2.6 Mortgage finance options

2.6.1 Home purchase mortgage

It is a loan item for people and corporate bodies to buy private property for individual use or rental. The borrower is expected to make a deposit of 20% and the bank gives a loan of 80% of the price tag for a period of 20 years. The financing cost on mortgage financing in Ghana constantly varied and 2% of the loan sum is used to legitimate the property.

2.6.2 Home equity mortgage

The home equity mortgage is for people who have acquired house and they want to discharge the equity in their property to enhance their liquidity position. This loan can be used for home improvement, development of business, paying school fees or purchasing a car. The most extreme loan permitted under this plan is also 80% however the loan term is typically for a long term say 15 years and interest rate on this loan facility varies.

2.6.3 Home completion mortgage

It is a mortgage designed to help borrowers with financing to finish the development of their homes. The understanding of this loan is to help the borrower accomplish their objective of becoming homeowners. This option is subject to credit profile of the borrower but the loan term is again 15 year and the maximum loan allowed is 50%. The interest rate is not constant.

2.6.4 Home improvement mortgage

This type of mortgage is for renovation and extension purposes on the existing house. This loan portfolio targets those who have houses and companies which need renovation or refurbishment. This mortgage type is not different from the home equity loan, however this loan is strictly used for the purposes that it was contracted. The maximum amount that one can received is 50% of the value of the property. The maximum period for repayment is 15 years and 15% of the loan is used for legal deposit towards title registration and security document.

2.6.5 Buy, Build and Own a house

This mortgage type is for low-income earners who want to acquire their own home by first acquiring land and then develop it over time. This mortgage option has buy land, build and own home options. The borrower contributes 10% of the land cost and after paying 50% of the cost of the land, the land is then released for development (HFC, 2016).

2.6.6 Real Estate Developer Finance

According to Renaud (2004), the demand for effective real estate financial system is growing and its emergence in the developing economies is overwhelming. The private estate developers in Ghana presently offer homebuyers mortgage financing option when initial payment is required and the amount left is spread over time.

2.7 Mortgage market

According to McDonald and Thornton (2002), mortgage market is classified in two ways: primary and secondary market.

2.7.1 Primary market

The mortgage market where new mortgages are formed is called a primary market. One advantage of this form is that it offers opportunity for borrowers and the mortgage managers to negotiate mortgage facility. BoG (2007) put the players in the primary mortgage market as the borrower and the lender. Here properties are used as a collateral for the loan.

2.7.2 Secondary market

When existing mortgages are bought it is called secondary market. The players in the secondary market are:

A. The funds providers also called mortgage bankers. It can be a commercial bank, loans and savings, investment bank and microfinance
B. Another player is the mortgage liaison who arrange mortgage financing between the financer and the borrower.
C. The next player is the company that offers the insurance to cover the loan in case of possible default on the side of the borrower.

2.8 Mortgage lending requirements

Every commercial entity needs to add value to its shareholders wealth. Mortgage finance organization as corporate bodies are set up to minimize cost and risk to maximize the wealth of the shareholders. The returns on mortgage are uncertain since it is a long term investment. In fact the mortgage venture is highly risky. This called for some requirements before the loans is offered to the borrower. Making loans decisions, the financiers need to assess the borrower's ability to pay bases on the person's past borrowing history, the income source and the person's current debt levels (United State policy report, 2013). The 5Cs hypothesis by Karley (2002) has been used by many financial institutions: Collateral, capital, condition, character and capacity.

2.8.1 Character

In evaluating mortgage loan, the character appraisal of the borrower is finished by learning data from individuals who know the candidate, sources of income, record as a consumer and other individual traits (Karley, 2002). On account of Ghana, purchasers usually purchases with cash and not on credit, this makes it hard to survey the record of loan repayment of individual borrowers making these evaluation for all intents and purposes troublesome.

2.8.2 Collateral

When properties are used to secure mortgage loan it is called collateral. The legal status, location, structure and the market value of one's property can facilitate the acquisition mortgage loan. For properties used for collateral, the preferred ones are the freehold which can be sold when the need a raises or when the borrower default.

2.8.3 Down Payment

Mortgage loan providers require potential borrowers to exhibit their riches by making monetary assurance in the property as up front installment. It is trusted that commitment made with property would motivate the borrower to pay the loan and keep the property in great condition. Typically the benchmark is 80% VTV (Value to Value) ratio. In Ghana, the initial installment for all intents and purposes ranges from
20% to half of the property estimation.

2.8.4 Monthly Payment

The monetary strength of the borrower is surveyed to see whether the borrowers' have the capacity to pay for the mortgage installment in addition to insurance before loan will be development to minimize default risk.

2.9 Challenges in the Mortgage Market

The fundamental objective of mortgage finance is to make institutional plans that can adequately activate funds from savers to borrowers to support a housing venture

(Chiquire and Lea, 2009) and to make it plausible for families to claim genuine asset. In any case, the industry is free from difficulties or challenges. There are a number challenges hampering the industry. Amongst them are:

2.9.1 Access to subsidizing

Housing financing is a basic issue as it requires tremendous capital investment. Herzog (2009) contended that, the present housing deficit is to be faulted on financial related. The absence of long term financing and high finance cost have brought about and made a colossal gap in the mortgage market (Donkor-Hyiaman, 2013). There is a complete absence of long term financing in the mortgage market which is causing the advancement of the mortgage market in Ghana making it troublesome for some individuals to profit from it (BoG, 2007). The absence of long term financing can likewise be connected with the undesirable way of Ghanaians not making long term venture with the banks accordingly, the sources of income is predominately short term making it hard to venture in the mortgage where it takes time to pay off. This shows that financing is a key segment with regards to housing. Without fitting financing, the mortgage or home loan industry won't work and the housing scarcity will raise. According to FTI (2012), the governments ought to consider the improvement her involvement in the system to hoist access to longer term funds in the housing industry.

2.9.2 Macroeconomic conditions

Unfavorable macroeconomic conditions include high financing cost, high inflation, fluctuation in the exchange rate, high-risk premium payment impact on the cost of the mortgage (BoG, 2007). To Aldashev (2009), high inflation adversely influences the operations and improvement of housing fund by increasing housing units which don't reflect family capital base. Foreign made materials increases building cost (Aluko, 2012). In Ghana, a large portion of the building materials utilized is imported giving the constant deteriorating cedi, this phenomena has added to a high production cost and making mortgage unreasonably expensive and costly for majority of Ghanaians.

2.9.3 Land tenure system

The land ownership in Ghana is endowed in the hands of Chiefs and family heads. The caretakers of the land in their own decide when to discharge land for development. Aluko (2012) concurs that, juridical landowners have diverse and sometimes conflicting interest, plan and programmes concerning how and when to develop the land. Additionally, bureaucratic in the area of title registration which now and again leads to land disputes among individuals involved. The circumstance hamper the activities of the real estate developers.

2.9.4 No legal system

There is no legal structure or a housing strategy that aids the housing market in Ghana. There is no reasonable direction with respect to how the country is getting along to boost housing supply to makeup the present shortage issue, for example, mortgage financing don't have any legitimate frame work to address these mirror difficulties. In this manner there ought to be a sound legal, institutional and tax structure is a vital necessity for setting up appropriate monetary instrument and market (Aldashev, 2009) for compelling housing financing.

2.9.5 Affordability

Kanagwa (2008) showed that, moderateness is key determent of homeownership rate. There are numerous families who can't bear the cost of the extreme costs charged by home loan lenders. There is high up front installment rate, some home loan lenders are taking between twenty to thirty percent of the aggregate home loan credit making it more costly and exorbitant taking a look at low income levels of workers, high unemployment rate and poor saving society particularly among individuals in developing nations.

Hassanein and el-Barkouky, (2008) found that, the nonattendance of a proficient mortgage optional business sector, high-mortgage lending rates, non-existence of different forms of mortgage instrument and absence of credit improvement in Egypt has added to the cost involved mortgage. In South Africa, compelling housing financing exists for just middle and upper salary workers (Moss, 2003) like the circumstance in Ghana and most of the people can't afford. Mortgage agent's evaluated borrower's capacity to repay mortgage by comparing regularly scheduled installment with salary and by surveying the presents of liquid reserves, venture and saving (Chiquire and Lea, 2009) before insurance is considered.

2.9.6 Information gap

Another challenge influencing the interest for mortgage is the absence of data about mortgage or home loan credit and mortgage money market. Aldashev (2009) in his study established that, individuals saw home purchasing process as excessively confounded while others think that it's difficult to access mortgage data.

2.9.7 Innovation and skills

Absence of innovation and human capital has genuine ramifications on housing improvement. Oyedokun (2013) showed that, innovation and capabilities is a challenge to the mortgage business. Enhanced innovation and skills stimulate housing delivery and decreases cost of production.

2.10 Innovative techniques to mortgage

In spite of the huge commitment by the traditional mortgage in inciting housing delivery, there is still the need to discover innovative systems that will augment the extent of home loan financing to urge more individuals to claim houses particularly low salary workers and individuals in the informal sector who don't have standard resource of income but need to benefit from home loan financing.

2.10.1 Mutual fund

Karley (2002) studied mortgage in Ghana and recommended that, given the economic, legal regime and financial system and general low-income levels of numerous Ghanaians, community improvement activity in the form of local mutual could create opportunity for mortgage loan to improve housing delivery. All the more, local mutual fund would have fair knowledge about the character of potential borrowers unlike home loan banks which will think that it's difficult to evaluate the record of such borrowers.

2.10.2 Housing microfinance

Merrill (2001) showed an innovative in microfinance for housing in the United States and developing markets and upheld Karley (2002) declaration that, microfinance for housing is a recently emergent financial related order which ought to be considered as a unique way to assist low and direct income families to acquire housing.

2.10.3 Alternative collateral

Merrill (2001) showed that an inventive and adaptable guaranteeing and loan items in developing business because of the absence of credit authorities, credit data and even income records. Banks depend on devices as option for collateral, lease-to-purchase, group guarantors and payroll deduction. Alternative collateral means borrower may have opportunity to link their mortgage to other forms of collateral such as their pension. The loan is not sometime secured but offer high rates. Finance deduction is where loan repayment are deducted from the source of one's monthly income.

2.10.4 Mortgage Finance Insurance (MFI)

Mortgage finance insurance arrangement ensure mortgage moneylenders are protected in case the borrower default in paying or unable to meet the legally binding commitments of the home loan (www.investipedia.com). Akinwunmi (2009) demonstrated that, mortgage insurance shield mortgage organizations against financing risk and augment loan to quality ratio. The insurance policy drives the mortgage business by decreasing moneylenders risk and to make more borrowers pulled into the mortgage system.

2.10.5 Access to information

The United State housing policy report (2013) specified that, mortgage education should be part of the mortgage process, so as to enable potential home buyers have contact with mortgage products.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The chapter three offers clarification to technique used to complete the study. This covers the research design, study population, sample size and data analysis.

3.1 Research Design

This study's research design is a quantitative cross – sectional survey. For cross-sectional survey, either the entire population subset of the population thereof is sampled. The data collection tool normally used in cross-sectional study is questionnaire. The data collection tool for this study was structured questionnaires. This is because the study aims to collect a number of responses from a large number of respondents. The populations for this study will comprises workers from formal sectors who qualified to access mortgage loan and real estate developers. Convenience sampling technique was employed in sampling the respondents for this study.

3.2 Target Population

The target population for this study comprises workers from formal sectors of Ghana's economy most especially those in Kumasi and real estate providers. The researcher will ensure that the demographic features of the respondents reflect the true picture of the population of the study.

3.3 Data Source

Primary data source was employed. Structured questionnaire was used. In all 85 questionnaires were distributed with 20 going to real estate providers and 65 to formal sector workers who qualify to access mortgage.

3.4 Sampling technique and Sample

Convenience sampling technique was used employed in this study. It is a nonprobability method for sampling people for a study for convenient and proximity purpose. A total of 20 real estate developers (List of Real estate companies in Kumasi, www.ghanayello.com) and 65 workers from the formal sectors who qualify to access mortgage loan were sampled (i.e. earn GH¢2,000 or more according to Stanbic Bank mortgage rules). These groups will be selected based on their accessibility when it comes to administering of the questionnaires.

3.5 Data collection instruments

Structured questionnaires were used as the main instrument for data collection. As the principal source of obtaining data, a set of clear questions were designed to mimic the problems and objectives of the research. The questions were of both close-ended and open-ended types. The close-ended questions were to make it easier for respondent who could not follow a particular sequence of answers to make easy analysis of questions posed. The open-ended questions were to allow for expression of opinions by the respondents on the topic.

In all 20 questionnaires were administered in relation to real estate developers and 65 questionnaires were distributed to workers from the formal sectors who qualify to access mortgage loan from the target population.

3.6 Measurement of variables

- Mortgage finance options were assess using mortgage options offered by Banks in Ghana.
- Factors influencing the use of mortgage finance options were assess using mortgage terms and mortgage interest (Pittman, 2008)
- Challenges facing the provision of mortgage as enumerated by BOG (2007)

3.7 Data Analysis

Processing and analyzing data involves a number of closely related operations which are performed with the purpose of summarizing the collected data and organizing these in a manner that they answer the research questions (objectives). In view of this, the collected raw data was examining for anomalies and corrections were made where possible. The Statistical Package foe Social Sciences (SPSS, version 16 for windows) was used to analyze the data. Descriptive and inferential statistics were employed to analyze the data. The main advantage is that the study includes many socio-economic, demographic and perceptional variables, so multivariate analysis and multiple linear regression models will be used to determine the effect of exploring mortgage financing in the housing sector.

3.8 Measurement of Reliability and Validity

To authenticate the results, suitable reliability and validity tests were conducted. Indeed, reliability of a questionnaire is the ability to test its consistency when it is repeatedly used, whereas validity is the ability of the questionnaire to measure the concept being studied. According to Ranjit (2005) reliability and validity provide confidence that the empirical findings accurately reflect the proposed constructs.

The instrument was pilot tested to examine its potency. The questionnaires were distributed to 10 people each who were within the sample group. Respondents were encouraged to make comments concerning the questions. Cronbrach's reliability was conducted with a cutoff point of 0.5. The test results can be found in table 3.1 below. The test results for the items social factors, factors influencing mortgage financing, challenges facing mortgage financing and performance of real estate developer were 0.671, 0.840, 0.855 and 0.665 which were all greater than the cutoff value of 0.5.

Table 3.1: Reliability test results

Variable	Number of items	Alpha Cronbrach's Coefficient
Social factor	7	0.671
Factors influencing mortgage financing	14	0.840
Challenges facing mortgage financing	14 9	0.855
Performance of real estate		0.665

Source: pilot test data

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.0 Introduction

Housing is a significant product of economic development in both developed and developing alike. The housing section of the economy will only boost economic development when the mortgage economy is well developed and it is efficient (HoekSmit, 2005). This chapter presents the data analysis and the discussion of the findings on the objectives: to evaluate the mortgage financing options in the housing industry of Ghana; to assess factors influencing the utilization of various mortgage options available in the housing industry; and to find out the key challenges confronting the mortgage financing in Ghana. Out of the 20 questionnaire given to Real estate developers, 19 representing 95% were retrieved and 61 representing 94% of 65 questionnaire given to formal sector workers were retrieved. In all, the response rate was 94%.

4.1 Bio Data

The bio data of the respondents comprise gender, age and level of education.

4.1.1 Real estate respondents

The results as showed in table 4.1 displays that most of the estate developers have been in business for about 11 to 15 years (47.4%). This means that majority of the estate developers in Kumasi has been in existence for at most 15 years.

Table 4.1: Demographic features of the real estate respondents

Variable	Option	Frequency (%)

Age of the company(Years)	*1-5*	8 (42.1)
	6-10	2 (10.5)
	11-15	9 (47.4)
Total		**19 (100)**
Real estate sector	*Brokerage and sale*	2 (10.5)
	Valuer	2 (10.5)
	Land developer	2 (10.5)
	Building developer	7 (36.9)
	Property manager	6 (31.6)
Total		**19 (100)**
Length of Service (Years)	*1 – 5*	5 (26.3)
	6 – 10	12 (63.2)
	11 – 15	2 (10.5)
	Above 15	0
Total		**19 (100)**
Position in the company	*Top management*	0
	Middle management	12 (63.2)
	Lower management	7 (36.8)
Total		**19 (100)**

Source: Field Survey, 2016

Table 4.1 demonstrates that building developers dominate the real estate sector in Kumasi (36.9%). This was followed by property manager (31.6%). This indicates that a number of real estate industry players were into building and property management. This also means that most of these developers have a lot of money since building development and property management require a lot of initial capital. This is an indication that Kumasi real estate sector is developed.

The researcher sought to find out the length of service of real estate officers. 26.3% of the officers have been in the industry for 1-5 years. 63.2% of the officers have been in the industry for 6-10 years and 10.5% have been in the industry for 11-15 years. This implies that majority of the industry players have been in the industry for at least 6 years.

The analysis in table 4.1 illustrates that 63.2% of real estate developers were in middle management and 36.8% were in lower management. This implies that most of the estate developers who responded to the questionnaire were part of management.

The analysis in table 4.2 shows that 57.4% of the formal sector respondents were males while the rest 42.6% were female. This means that majority of the formal sector respondents were males. This results in table 4.2 also shows that 47.5% of the respondents were in the age cohort 20-30 years, 32.8% were in the age cohort 31-40 year and 19.7% were in the age cohort 41-50 years. This means that all the formal sector workers were in active age cohort. On education, the results in table 4.2 depicts that 32.8% of the respondents have diploma and certificates, 45.9% have degree and 21.3% have post graduate degree. This illustrates that majority of the formal sector workers in Kumasi are degree holders.

Table 4.2: Demographic features of the formal sector respondents

Variable	**Option**	Frequency (%)

Gender	*Male*	35 (57.4)
	Female	26 (42.6)
Total		**61 (100)**
Age (Years)		
	20-30	29 (47.5)
	31-40	20 (32.8)
	41-50	12 (19.7)
Total		**61 (100)**
Educational level	*Diploma and Certificate*	20 (32.8)
	Degree	28 (45.9)
	Post Graduate	13 (21.3)
Total		**61 (100)**
Length of Service (Years)	*less than 5*	12 (19.7)
	5 – 10	14 (23.0)
	11 – 15	17 (27.9)
	Above 15	18 (29.5)
Total		**61 (100)**

Source: Field Survey, 2016

The results also depicts that 19.7% of the respondents have worked for less than five (5) years, 23.0% have worked for 5-10 years, 27.9% have worked for 11-15 years and 29.5% of them have worked for at least 15 years. This means that majority of the respondents have worked for at least 5 years.

4.2 Social Factors

Table 4.3 presents the views of real estate developers on how social factors influence or attract mortgage loan seekers.

Table 4.3: Response by real estate developers on social factors that attract people for mortgage loan

Factor	Mean (Std. deviation)

Standing out to impress	3.79 (1.182)
Ability to make decisive choices	3.89 (1.150)
Ambitious of people	4.26 (0.872)
To be admired	4.00 (0.943)
Being creative in the estate business is essential to me	3.95 (1.079)
Taking advice from people in the industry	3.32 (1.157)
I am just interested in real estate products	3.48 (1.071)

Source: Field Survey, 2016

From table 4.3, with a mean score of approximately four (4), it could be observed that most of the real estate respondents agreed that "standing out to impress" attract people go for mortgage loans. For "ability to make decisive choices" the mean score was approximately four (4), "ambitious of people" the mean score was approximately four (4), "to attract admiration" the mean was four (4) and "being creative in the estate business is essential to me" had a mean score of approximately four (4). This means that "Standing out to impress" "ability to make decisive choices", "ambitious of people", "to be admired", and "being creative in the estate business is essential to me"" are the social factors that according to the real estate developers attract people to go for mortgage loans.

Table 4.4: Response by Workers on social factors that attract people for mortgage loan

Factor	Mean (Std. deviation)
Standing out to impress	3.11 (1.507)
Ability to make decisive choices	3.67 (1.193)
Ambitious of people	4.02 (1.118)
To be admired	3.64 (1.291)
Being creative in the estate business is essential to me	3.87 (1.284)
Taking advice from people in the industry	2.93 (1.167)
I am just interested in real estate products	3.64 (1.212)

Source: Field Survey, 2016

Table 4.4 present the views of formal sector workers on what attract people to go for mortgage loans. The results as presented in table 4.4 shows that ambitious of people (4.02), being creative in the estate business is essential to me (3.87), ability to make decisive choices (3.67) and then to be admired were the social factors that attracted people to go for mortgage loans. This then affirms the assertion by the real estate developers. This therefore means that people are attract to mortgage loans based on the following social factor: I am ambitious and ready to work hard and get ahead; I make my own decisions about what I do; I want people to admire what I do; and then
I make my own decisions about what I do.

4.3 Mortgage option awareness

The researcher sought to find out whether there are mortgage options in Kumasi and also to find out whether people are aware of the mortgage options in Kumasi. Table 4.5 illustrate the responses of the real estate developers.

Table 4.5: Response by real estate on mortgage options

Mortgage option	Mean (Std. deviation)
Mortgage for residential property for personal use or rental	0.84 (0.375)
Mortgage for home improvement, expansion of business, paying school fees or buying a car	0.26 (0.452)
Mortgage design to assist borrowers with financing to complete the construction of their homes	0.21 (0.419)
Mortgage for renovation and extension work on existing homes	0.32 (0.478)
Mortgage for Buy, Build & Own a home	0.84 (0.375)

Source: Field Survey, 2016

The results shows that 84% of the respondents were aware of mortgage for residential property for personal use or rental, 26% were aware of mortgage for home improvement, expansion of business, paying school fees or buying a car, 21% were aware of mortgage design to assist borrowers with financing to complete the construction of their homes and 84% were also aware of mortgage for buy, build and own a home. This implies that real estate developers were aware of mortgage for residential property for personal use or rental and mortgage for buy, build and own a home.

Table 4.6: Response by workers on mortgage options

Mortgage option	Mean (Std. deviation)
Mortgage for residential property for personal use or rental	0.70 (0.460)
Mortgage for home improvement, expansion of business, paying school fees or buying a car	0.20 (0.401)
Mortgage design to assist borrowers with financing to complete the construction of their homes	0.18 (0.388)
Mortgage for renovation and extension work on existing homes	0.36 (0.484)
Mortgage for Buy, Build & Own a home	0.56 (0.501)

Source: Field Survey, 2016

The assertion of the real estate developers were affirmed by the formal sector workers. With 70% and 56%, the formal sector workers chose mortgage for residential property for personal use or rental and mortgage for buy, build and own a home respectively (Table 4.6).

4.4 Factors that influence mortgage financing

The mortgage establishments in Ghana are not many and as such their impact is restricted as their actions profit only high income earners (BoG, 2007). This according

to Donkor-Hyiaman (2013) is making mortgage lending costly and unpleasant to majority of the formal sector workers. Mortgage financing need to be promoted in Ghana as it stimulates housing supply and develops the location it functions. It helps lower income earners to leaving (Oyedokun, 2013). Table 4.7 presents the response on mortgage financing as presented by the real estate developers. The analysis as presented in the table 4.7 shows that the mean score for "Interest for mortgage in Ghana are cheap" was 2.58, "Interest remain unchanged for the entire duration of the loan" had a mean score of 2.42, "Customers with mortgage loan are required to pay in installment until the loan is cleared" was 3.11, "The mortgage process in a bank is simple and short" was 2.42", "Ghana mortgage prices are cheap" had a mean score of
2.11, "Security is require before one succeed for a mortgage" had a mean score of 3.26, and "Bank staff who managed mortgage loans are skillful and competence to assist customers on mortgage" had a mean score of 3.32.

Table 4.7: Response by real estate developers on factors influencing mortgage financing

Factor	Mean (Std. deviation)
Interest on mortgage loans in Ghana are cheap	2.58 (1.216)
Interest remain unchanged for the entire duration of the loan	2.42 (0.961)
Customers with mortgage loan are required to pay in installment until the loan is cleared	3.11 (1.100)
The mortgage process in banks is very simple	2.42 (1.017)
Ghana mortgage loans are cheap	2.11 (0.937)
Security is require before one succeed for a mortgage in a bank	3.26 (1.195)

Bank staff who managed mortgage loans are skillful and competence to assist customers on mortgage	3.32 (1.003)
Customers mortgage requests are adequately handle by banks	3.21 (0.918)
Mortgage are quickly approved by Banks	2.95 (1.268)
The mortgage approval is suitably done	3.16 (0.958)
The mortgage payments always fit in the customers strategies	2.53 (1.172)
Adequate bank data are provided to customers when mortgage loan are been processed	2.89 (1.150)
Repayment plan given by Banks favor customers	3.00 (1.247)

Source: Field Survey, 2016

Also, “Customers mortgage requests are adequately handle by banks” had a mean score of 3.21, and “Mortgage are quickly approved by Banks” scored an average of 2.95. The analysis shows that most of the respondents disagreed with the following statements: Interest on mortgage loans in Ghana are cheap; the mortgage process in banks is very simple; and Ghana mortgage loans are cheap.

However, most of the respondents were undecided on the following statements: interest on mortgage loans in Ghana are cheap; customers with mortgage loan are required to pay in installment until the loan is cleared; security is require before one succeed for a mortgage in a bank; Bank staff who managed mortgage loans are skillful and competence to assist customers on mortgage; customers mortgage requests are adequately handle by banks; mortgage are quickly approved by Banks; the mortgage approval is suitably done; the mortgage payments always fit in the customers strategies; adequate bank data are provided to customers when mortgage loan are been processed; and repayment plan given by Banks favor customers. These findings disagreed with the findings by Chiquier and Lea (2009). According to Chiquier and Lea (2009), mortgage provide good security and it provides cheap way for household to generally finance their housing need.

The implication of the results is that mortgage financing in Ghana is costly since interest remain unchanged for the entire duration of the loan, the mortgage process in banks is not very simple, and Ghana mortgage loans are not cheap. The analysis in table 4.8 depicts that the responses of the formal sector workers is not different from the responses of the real estate developers. This affirms that mortgage financing in Ghana is expensive and the process of acquiring mortgage loan is not all that simple.
It could therefore be said that mortgage loan exist in Ghana but it is costly.

Table 4.8: Response by workers on factors influencing mortgage financing

Factor	Mean (Std. deviation)
Interest on mortgage loans in Ghana are cheap	1.85 (1.030)
Interest remain unchanged for the entire duration of the loan	2.36 (1.265)
Customers with mortgage loan are required to pay in installment until the loan is cleared	3.03 (1.316)
The mortgage process in banks is very simple	2.38 (1.186)
Ghana mortgage loans are cheap	2.33 (1.287)
Security is require before one succeed for a mortgage in a bank	3.34 (1.196)
Bank staff who managed mortgage loans are skillful and competence to assist customers on mortgage	3.42 (0.986)
Customers mortgage requests are adequately handle by banks	2.87 (1.258)
Mortgage are quickly approved by Banks	3.18 (1.232)
The mortgage approval is suitably done	3.46 (0.947)
The mortgage payments always fit in the customers strategies	2.78 (1.149)
Adequate bank data are provided to customers when mortgage loan are been processed	2.65 (1.075)

Repayment plan given by Banks favor customers	2.95 (1.217)

Source: Field Survey, 2016

4.5 Real estate performance in Ghana

With growth in the mortgage loans, the performance of real estate will grow in terms of less risk and higher returns. This study sought to find out the performance of real estate sector of the Ghana's economy.

The reactions of the respondents are introduced in table 4.9 and table 4.10. The examination as introduced in table 4.9 demonstrates that the respondents were unfixed regarding whether the estate business in Ghana has been developing in the last 10 years with a mean score of 3.32. The estate developers (land designers) were additionally unfixed concerning whether land investors possessed the capacity to get back what they invested, the mean score was 3.42.

Table 4.9: Response by real estate developers on performance of real estate in Ghana

Factor	Mean (Std. deviation)
For the past ten years real estate business in Ghana has seen improvement	3.32 (1.108)
Estate developers breakeven	3.42 (1.305)
Rental prices keep on increasing with profit	3.58 (1.216)
The risk involved in real estate is minimal compared to other businesses in Ghana	3.32 (1.293)
There is a higher risk of houses not being occupied because of higher rent	3.53 (0.905)
Real estate investment returns are higher as compared to other businesses	3.68 (0.946)

With increased in awareness, real estate performance will be better automatically	3.21 (1.228)
Estate for residential and offices are not occupied due to high inflation	3.16 (1.015)

Source: Field Survey, 2016

The estate developers were additionally unfixed on the following: The risk involved in real estate is minimal compared to other businesses in Ghana (Mean score = 3.32); with increased in awareness, real estate performance will be better automatically (mean score = 3.21); and estate for residential and offices are not occupied due to high inflation (mean score = 3.16). The estate developers concurred that rental prices keep on increasing with profit (mean score = 3.58). They additionally concurred that there is a higher risk of houses not being occupied because of higher rent (mean score = 3.53). The estate developers' additionally concurred that real estate investment returns are higher as compared to other businesses.

Table 4.10: Response by workers on performance of real estate in Ghana

	Mean (Std. deviation)
For the past ten years real estate business in Ghana has seen improvement	3.62 (0.969)
Estate developers breakeven	3.21 (1.240)
Rental prices keep on increasing with profit	3.11 (1.170)
The risk involved in real estate is minimal compared to other businesses in Ghana	3.20 (1.263)
There is a higher risk of houses not being occupied because of higher rent	3.67 (1.076)
Real estate investment returns are higher as compared to other businesses	3.21 (1.097)
With increased in awareness, real estate performance will be better automatically	3.56 (1.148)
Estate for residential and offices are not occupied due to high inflation	3.34 (1.015)

Source: Field Survey, 2016

The outcomes in table 4.10 exhibits the responses of formal sector workers on the performance of estate developers. To the workers, for the past ten years real estate business in Ghana has seen improvement. In any case, they were likewise unfixed on the following: estate developers breakeven; rental prices keep on increasing with profit; the risk involved in real estate is minimal compared to other businesses in Ghana; real estate investment returns are higher as compared to other businesses; and estate for residential and offices are not occupied due to high inflation.

The formal sectors respondents agreed with the following statements: there is a higher risk of houses not being occupied because of higher rent; and with increased in awareness, real estate performance will be better automatically. This is because people think that interest rate offered by banks are high. The mortgage market can only performance positively when accessing mortgage loan become cheap and the process less complex. However, the market is viable as most people agreed that the risk that people will not occupied the houses as a result of high rent is minimal.

4.6 Challenges facing the real estate sector

Every mortgage financier main aim is to create institutional arrangements that can efficiently mobilize funds from investors to mortgagors to finance a housing investment (Chiquire and Lea, 2009). This cannot be done with some challenges. Some of the challenges have been presented by the table 4.11 and table 4.12 below. The results as displayed in the table 4.11 identified the following as some of the challenges impeding the growth of the mortgage market in Ghana: : "high cost of financing"; "high interest rate"; "high inflation rate"; "low income levels of workers"; "high unemployment rate"; "poor saving culture"; and "lack of information about mortgage credit and mortgage finance market”. These were some of the problems identified by the real estate developers.

Table 4.11: Response by real estate developer on challenges facing mortgage financing

Challenges	Mean (Std. deviation)
Lack of long term financing	3.47 (1.073)
High cost of financing	4.16 (0.898)
High interest rate	4.05 (0.970)
High inflation rate	3.84 (1.167)
Exchange rate instability	3.37 (1.065)
Problem of land tenure system	3.21 (1.228)
Bureaucracy in land little registration	2.95 (1.311)
Lack of housing policy guiding housing market	3.11 (1.150)
Exorbitant prices charge by mortgage financiers	2.42 (0.961)
High down payment rate	2.89 (1.243)
Low income levels of workers	3.72 (1.293)
High unemployment rate	3.68 (1.108)
Poor saving culture	3.57 (0.964)
Lack of information about mortgage credit and mortgage finance market	3.63 (1.257)

Source: Field Survey, 2016

Table 4.12: Response by workers on challenges facing mortgage financing

Challenges	Mean (Std. deviation)

Lack of long term financing	3.31 (1.191)
High cost of financing	3.44 (1.272)
High interest rate	3.93 (1.109)
High inflation rate	3.77 (1.230)
Exchange rate instability	3.78 (1.273)
Problem of land tenure system	3.28 (1.343)
Bureaucracy in land little registration	3.03 (1.516)
Lack of housing policy guiding housing market	2.98 (1.323)
Exorbitant prices charge by mortgage financiers	2.72 (1.199)
High down payment rate	2.69 (1.232)
Low income levels of workers	4.80 (1.364)
High unemployment rate	4.09 (1.367)
Poor saving culture	3.72 (1.218)
Lack of information about mortgage credit and mortgage finance market	3.64 (1.162)

Source: Field Survey, 2016

The formal sector workers also identified the following as some of the challenges facing the mortgage economy in Ghana. The challenges as identified were: “high interest rate”, “high inflation rate”, “exchange rate instability”, “low income levels of workers”, “high unemployment rate”, “poor saving culture”, and “lack of information about mortgage credit and mortgage finance market”. This shows that the real estate developers and the formal sector workers agreed on most of the challenges. This means that the mortgage market in Ghana can performance very well if the management of the Ghana’s economy are able to manage it well to create wealth.

4.7 Inferential Statistics

To assess the influence of the independent indicators (Social factors and financial factors) on the dependent indicator, mortgage performance in Ghana, of the study, the following inferential statistics were used: correlation; and multiple linear regression.

4.7.1 Correlation analysis

To find out the strength of relationship between the variables, correlation analysis was employed. To avoid spurious regression, the independents indicators must not be correlated (Gordor & Howard, 2006). The analysis as presented in table 4.13 showed that there is a positive relationship between the dependent indicator and the independent indicators. The correlation coefficients between mortgage performance and the independent variables social factors and financial factors were 0.583 and 0.460 respectively. With p-values 0.000 and 0.004 < 0.025, it could be said that the strength between the dependent indicator and the independent indicators were statistically significant.

Table 4.13: Correlation Coefficient of the Model

		Mortgage performance (Q)	Social factors (X_1)	Financial factors (X_2)
Mortgage Performance	Correlation coefficient	1	0.583	0.460
Sig. (2-tailed)			0.000	0.004
Social factors			1	0.123
Sig. (2-tailed)				0.740
Financial factors				1

Source: Field survey, 2016

Also there is a positive relationship between the independent indicators. However, with p-value of 0.740 > 0.025, it could be said that the relationship between the independent indicators is statistically insignificant. This result support the findings by Kim and Subramanian (2005).

4.7.2 Regression Analysis

Multiple linear regression analysis was carry out to find out the impact of social factors and financial factors on the mortgage performance in Ghana. Regression analysis is a statistical tool that is used to predict the dependent indicator on the basis of several independent indicators.

Table 4.14: ANOVA

Model		Sum of Square	df	Mean Square	F	p
1	Regression	28.876	2	14.438	4.576	0.013
	Residual	242.924	77	3.155		
	Total	271.800	79			

Source: Field survey, 2016

The analysis in the table 4.14 displayed statistics that shows whether the regression model is good for prediction. The F-value of 4.576 and p-value of 0.013 < 0.05, shows that the model is statistically significant and can be used for prediction.

Table 4.15: Coefficients of the Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients		
		Beta	Std. Error	Beta	t	p
(Constant)		3.895	0.994		3.917	0.000
Social factors		0.329	0.120	0.295	2.736	0.008
Financial factors		0.146	0.110	0.302	2.482	0.036
R	0.719					
R^2	0.517					

Source: Field survey, 2016

Let the multiple regression equation be $Q = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \mu$

Where Q is the predictor indicator (Mortgage performance), X_1 and X_2 represent the independent indicators and μ is unexplained independent indicators.

$\bar{Q} = \beta_o + \beta_1 X_1 + \beta_2 X_2$, $\bar{Q}$ is the predicted value. From the table 4.16, it can be seen that all the coefficients of independent indicators were statistically significant at 5% significance level. This means that all the independent indicators can be part of the model. The model is $\bar{Q} = 3.895 + 0.329X_1 + 0.146X_2$

The results shows that social factors and financial factors can explain 52% of the variance in the real estate performance. It was also observed that social factors (Beta = 0.329) influenced real estate performance more than financial factors (Beta = 0.146).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter presents the summary of the findings, the conclusion and the recommendations of the study. The summary of the findings and the conclusion were made in harmony with the objectives of the study.

5.1 Summary of the findings

5.1.1 To evaluate the mortgage financing options in the housing industry of Ghana

The study revealed the following as the mortgage options available in Ghana:

1. Mortgage for residential property for personal use or rental
2. Mortgage for renovation and extension work on existing homes
3. Mortgage for buy, build and own a home

The study however, established mortgage for residential property for personal use or rental and mortgage for buy, build and own a home as the most established mortgage options in Ghana.

5.1.2 To assess factors influencing the utilization of various mortgage options available in the housing industry

The study revealed the following social factors as what attract people to the mortgage market. People are attracted to mortgage because they want to stand out to impress the society, they want to be seen as decision maker, some people are ambitious and they want people to see that they are hard workers, other also want people the society to admire what they do, and others also want people to see that they are creative and they can think to bring new ideas which are important to the development of the real estate business in Ghana.

The study also revealed the following as financial factors that influence mortgage financing:

- Interest on mortgage loans in Ghana are cheap
- Interest remain unchanged for the entire duration of the loan
- Customers with mortgage loan are required to pay in installment until the loan is cleared
- The mortgage process in banks is very simple
- Ghana mortgage loans are cheap
- Security is require before one succeed for a mortgage in a bank
- Bank staff who managed mortgage loans are skillful and competence to assist customers on mortgage
- Customers mortgage requests are adequately handle by banks
- Mortgage are quickly approved by Banks
- The mortgage approval is suitably done
- The mortgage payments always fit in the customers strategies
- Adequate bank data are provided to customers when mortgage loan are been processed
- Repayment plan given by Banks favor customers

However, it was established by the study that interest rates for mortgages in Ghana are not cheap, interest rate does not remain constant for the whole period of the mortgage, and Ghana's mortgage prices are not cheap and the mortgage process in banks are not simple.

On mortgage performance, it was established that high cost of financing, high level of interest rate, high level of inflation rate, instability in the exchange rate, workers not paid living wage, rate of unemployment is high, not having good habit of saves, and in adequate mortgage loan information are the causes of poor performance of mortgage in Ghana.

The study further established a significant positive relationship between mortgage performance and social factors. It was established that social factors explained most part of the mortgage performance in Ghana. The study also established that mortgage performance correlate positively with financial factors. However, there was a weak positive correlation between social factors and financial factors.

5.1.3 To find out the key challenges confronting the mortgage financing in Ghana

The study identified high cost of financing, high interest rate levels, unstable inflation rate, workers low income levels, high level of unemployment rate, bad habit of savings, and insufficient data on mortgage loans and mortgage market as some of the challenges facing the mortgage industry in Ghana.

5.2 Conclusion

It has been established that social factors influence mortgage financing. This is so because of the ambition of people and the societal influence which affect people choice of entering the mortgage market. When people benefit from mortgage financing they influence others to join. This helps the mortgage market to improve on their customer base.

Financial factors were also considered as one of the factors that influence mortgage financing. Financial factors were found to be significantly correlated with mortgage performance. Elements of financial factors like interest on mortgage loans in Ghana are cheap, interest remain unchanged for the entire duration of the loan, and Ghana mortgage loans are cheap and the mortgage process in a bank is simple and short, influence mortgage performance greatly. Bank staff who managed mortgage loans are skillful and competence to assist customers on mortgage should be given the necessary attention to improve mortgage performance. Banking institutions should revisit their mortgage interest rate to capture more people to the mortgage market.

5.3 Recommendations

5.3.1 Policy Recommendations

Banks staff who are in charge of given out mortgage loans should be given in service training all the time to equip them on modern mortgage options and also to be able to attend to customers questions on mortgage.

The Government of Ghana should make sure that the economy of Ghana is stabilized such that it can reduce unemployment and also reduce interest rate on all forms of loans especially interest on mortgage loans to help most of the working class to acquire properties legally.

All financial institutions that offer mortgage loan should make sure the loans authorization and approvals are swiftly done so as to attract more people to access mortgage loans.

5.3.2 Further Research

Further studies is recommended on how the real estate industry will be improve to ensure that people will rather go to the real estate developers than to build their own house.

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