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THE NATURE OF MORTGAGE REPAYMENT PLANS IN GHANA

Justice Agyei Ampofo[1,2]
[1]University for Development Studies, Tamale (Ghana)
[2]University of Education, Winneba (Ghana)

*Corresponding Author: Justice Agyei Ampofo
Corresponding Author Email: papajusty@gmail.com
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ABSTRACT

Mortgage finance is one source of capital that cannot be ruled out when it comes to housing finance. It has globally aided many countries in terms of housing finance. A country's housing finance system can work effectively if there is/are mortgage repayment plan(s) that would ensure flexibility in repayment of mortgage loans and encourage supply and demand for mortgage products. The study sought to find out the types and nature of mortgage repayment plans in Ghana. All the financial institutions which were into mortgage banking constituted the sample. The result shows that fixed rate method is the commonest method used in Ghana and other repayment plans have evolved from the fixed rate repayment plan. Exchange rate fluctuations, high interest rates and high house prices result in higher initial monthly mortgage repayment using the fixed rate repayment plan. It is recommended that mortgage lending institutions should reduce their interest rate for low middle income earners in Ghana to qualify for mortgage.
Keywords: Mortgage, Mortgage Repayment Plans, Mortgage Institutions, Ghana

INTRODUCTION

It is noted that mortgages serve as a good housing financing mechanism (Akuffo, 2006; Ampofo, 2020). Mortgages have been able to turnaround the housing sector in the developed world (Abdul Mubarak, 2013). However, mortgage repayment plans (MRP) are crucial to the success of mortgage products to both the mortgagee and mortgagor. This is because the repayment of mortgage by the mortgagor cannot be done without the repayment plan suiting the income flow of the mortgagor on one hand and the mortgagee on another hand. This is the reason why several mortgage repayments plans (MRPs) exist in the mortgage market as improvement over each other for the easy payment of the mortgage debt by the borrower (BOG, 2012).

Mortgage finance is one source of finance that cannot be ruled out when it comes to housing finance. It has globally aided many countries in terms of housing finance (Gyamfi, 2003). For instance, Johnson (2013) argued that a long commitment of the federal governments for housing has been achieved by use of the mortgage market. The fact is that Ghana government's commitment to housing through the use of mortgages has always failed (Johnson, 2013).

Pundits, notably Ampofo (2020), link the failure of the Ghanaian mortgage industry to insufficient regulatory framework and inflation. All the facts above reduces to the ability to pay which partly depends on the MRPs in use. Thus, an MRP can help many people (especially the low to middle income class) to either qualify for mortgages or not (David, 2006). It appears the current MRPs are not suitable for the income levels of many Ghanaians given that a significant proportion of the working class do not qualify for mortgage products. It is therefore necessary to question the nature and/or kinds of MRPs used in the country. Do they suit the income levels of the average Ghanaian worker? In other words, if the MRPs do not help the borrowers (potential mortgagors), they cannot service their loans without default occurring.

Gyamfi (2003) noted that default puts the lenders' money in jeopardy therefore they never want default to occur. As noted earlier in the background, suitable MRP aids the mortgagor so that he can keep servicing the mortgage till maturity. The question that may arise is that, are the MRPs suitable for both lenders and borrowers? And if that is the case, what is the implication for mortgage underwriting in the country? The study therefore seeks to find empirical answers to the following questions.

REVIEW OF RELATED LITERATURE

Concept of Mortgage

According to the Ghana Mortgages Decree, 1972 (NRCD 96) a mortgage is defined as: "A contract charging immovable property as security for the due repayment of debt and any interest accruing thereon or for the performance of some other obligation for which it was given, in accordance with the terms of the contract".

Mortgage Repayment plans and types

Mortgages are basically classified according to the characteristics of their payment models, frequency of payments, interest rate computations and equity shares in a property. The various types include the following;

Fixed Rate Payment Mortgage

This mortgage type has been the primary instrument for home financing in the USA since 1930. Its distinct nature allows for loan and interest amortisation to be made in equal periodic instalments usually 20-30 years after such payments have been computed based on an agreed contractual rate which cannot be varied until the contract is abrogated or re-negotiated.

Demerits

- A fundamental limitation of fixed rate mortgages (FRMs) is that interest rate risk is borne exclusively by lenders.

- The standard fixed rate level payment mortgage instrument is highly volatile during inflation periods with its effect being diminishing values of pre-proposed periodic payments (tilt effect). Building a system around the fixed-rate mortgage therefore requires a secondary mortgage market which can help absorb inflationary risks (Lea, 2010).

Against all odds, Kenneth (2013) noted that fixed-rate mortgage loans are advantageous because they provide a peace of mind and security to borrowers, knowing that they don't have to worry about future interest rate rises. But also the possibility of unanticipated inflation further increases the real interest rate that both savers and lenders require hence, increasing the real cost of mortgages (Asare and Whitehead, 2006).Therefore, some analysts conclude that the purchase of housing under this repayment plan becomes more difficult as inflation proceeds (Ampofo, Amoah & Peprah, 2020).

Graduated Payment / Deferred Instalment Mortgage

Graduated Payment Mortgage (GPM) loan typifies a loan where the scheduled repayments begin at a level lower than that of a comparable standard mortgage loan and rises to a point determined by the loan documents with the period of the rise, the rate of increase, and the interest rate being fixed and captured in the loan documents (Asare, 2004). This mortgage type assumes that the borrower will be better-off or his income will increase with inflation in the latter years of the mortgage term (CAHF, 2011; BoG, 2012). Hence, it is a loan given in anticipation of future higher incomes for the borrower. The *quid pro quo* for the low initial payment during the differential period (initial years) is a larger payment later on after income levels have increased considerably. Graduated payment mortgages have clearly been effective in increasing access to homeownership for wealth-constrained households by shifting the burden of the mortgage to later years (David, 2006).

Demerits of GPM's

Despite the advantages of the GPM for many borrowers, Melton (1980) cites several problems with the GPM from the lender's perspective.

a. There is possibility of negative amortization in the early years of the loan, as an impediment to lending for financial institutions that report income on an accrual basis since they are sure to incur a higher tax liability.
b. Negative amortization occurs in the early years of a GPM, thereby reducing the borrower's equity in the home.
c. David (2006) also noticed that unless lenders believe property values will rise, they usually require a higher down payment to offset the effects of negative amortization and this is largely unattractive to borrowers.

Adjustable or Variable Rate Mortgage

The concern in diminishing values of periodic payments incited proposals for alternative mortgage instruments hence the naissance and nurture of variable rate mortgages. Adjustable or Variable Rate Mortgages (ARM's) have their interest rates changing periodically, usually in relation to an index with payments going up or down accordingly. Lenders generally charge lower initial interest rates for variable rate mortgages than for fixed-rate mortgage therefore making the variable rate mortgage easier on the pocket than a fixed-rate mortgage given the same loan amount. Preference for this instrument largely stems from its ability to minimize interest rate risk for the mortgagee (lender) and shifting it to the mortgagor (borrower) depending on the speed of adjustment (Chiquier, 2004). Adjustable rate mortgages could also be less expensive over a long period than fixed-rate mortgages especially where interest rates remain low and steady or could be very expensive where interest rates fluctuate and increase uncontrollably. In essence, an ARM offers the borrower a lower initial rate (teaser rate) which translates into lower initial payments in exchange for the taking up of higher risk in future (Asare, 2004).

The striking thing about variable rate mortgage types is their concentration on hedging against inflation by employing changing mortgage rates, amortisation payments as well as varying payment periods. Some ARM interest increases can be so high that the home owner cannot make the payment and may have to go into foreclosure, losing the home and the equity that has been built up in the home (GSS, 2005; GLSS, 2008).

Dual Rate Variable Rate Mortgage (DRVRM)

The dual rate variable rate mortgage aims at reducing the absurdity between the mortgage rate and the deposit rate in a manner which allows the payment factor to have a long-term reference rate (payment rate) whiles the interest portion has a short-term reference rate (accrual rate) (Asare, 2004).

Chiquier (2004) elaborates on this by admitting that the accrual rate aims at determining that part of the borrower's payment that constitutes interest amortization and the payment rate to determine the size of the payment targeted towards defining the real payments (usually fixed) that could amortize the principal. The instrument is attractive to borrowers when the periodic payment sizes are lesser than they would be on a conventional mortgage. It addresses the two problems inflation creates for a mortgage: the lenders need to retain a real rate of return and borrowers need to avoid unaffordable payment (David, 2006; Ampofo, Nassè, Amoah & Peprah, 2020).

The pitfall of this instrument lies in its potential for negative amortization, which will occur if the interest payment rate is less than the interest accrual rate. Dual rate mortgages, thus, tend to eliminate the interest rate risk for the lender and offset this risk for the borrower with attractive payments and such payments adjusted according to an index reflecting the incomes of borrowers (Chiqiuier, 2004).

Indexed Mortgages

These are essentially the mortgage types whose interest rates and loan repayment structures adjust according to a set index. Variants of this mortgage type are discussed below;

Price Level Adjusted Mortgage (PLAM)

Periodic payment adjustments of a PLAM are made to reflect the prevailing price level of a mortgaged property and to take account of inflation. Brazil has adopted price-level indexation of financial contracts to a much greater degree than any other country (Johnson, 2013).

Another issue with price-level-indexed mortgages is whether household income will keep up with mortgage payments (HFC, 2008: 2009:2010). Computation of periodic payments is based on the real market rate at par with inflation and capital appreciation rather than a nominal rate which is usually higher and accounts for expected inflation rates (Chiquier, 2004). This mortgage type is designed to be a perfect block to inflation and changing economic conditions. Where property values appreciate or decline, the outstanding mortgage loan balance adjusts accordingly. Payments on PLAM's retain their real purchasing power throughout the term of the mortgage (BOG, 2012).

Interest Rate or Inflation Indexed Mortgage

Johnson (2013) describe a situation where homeowners prefer a mortgage linked to an inflation index over a fixed rate mortgage. In his model, the utility of the homeowner depends on the effect of inflation on labour income as against the net value of houses. Indexed mortgage instruments therefore facilitate housing finance in inflationary environments. The lack of synchronization between wage increases and indexation in mortgages seems to be at the root of the wide resistance to mortgage indexation (Lea, 2009). In contrast to traditional mortgages, such indexed mortgages trigger higher payments only when housing prices actually rise.

Equity Premised Mortgages

These are the mortgage types that allow the lender to have an equity share in a mortgaged property. Some of the variants of equity related mortgages include the following.

Reverse Annuity or Home Equity Conversion Mortgage

This is a form of mortgage in which the lender makes periodic payments to the borrower using the borrower's equity in the home as collateral for repayment of the loan.

This loan type as observed;

(a) Provides periodic payments to the borrower based on the accumulated equity in the real estate securing the loan, with payments made directly by the lender or through the purchase of an annuity from an insurance company; and

(b) Becomes due either: at a specified date or on the occurrence of a specified event, such as a sale of the real estate securing the loan or the death of the borrower.

Reverse mortgage is therefore a special type of home loan that allows the homeowner to convert the equity in their home into cash, while continuing keep title and live in 32 their home. Homeowners can receive payments in a lump sum, on a monthly basis or for a fixed term and it is available regardless lenders income level (Kenneth, 2013).

Characteristics

- ❖ The Home Equity Conversion Mortgage (HECM) has neither a fixed maturity date nor a fixed mortgage amount. Interest rates for reverse annuity mortgages may be fixed or adjustable depending on the agreement between lender and borrower.
- ❖ Usually, the HECM borrower will never owe more than the loan balance or the value of the property, whichever is less; and no assets other than the home must be used to repay the debt.
- ❖ There is no need for initial down payments or an investigation of the borrower’s income level to qualify for a reverse mortgage.
- ❖ Persons who are eligible for this mortgage type should be people beyond retirement age, 62 in USA. This is in line with providing colossal sums for retired persons to help improve their livelihoods. The older the borrower is, the larger the percentage of the home’s value that can be borrowed.

Shared Equity/Appreciation Mortgage

A mortgage in which a borrower receives a below market interest rate in return for which the lender (or another investor such as a family member or other partner) receives a portion of the future appreciation in the value of the property. This pricing mechanism provides stable investor returns while also providing borrowers with a predictable and transparent cost of capital. Shared-appreciation mortgages offer interest rate reductions in exchange for a contractually specified share of appreciation on the home and also have long unpredictable payoff periods. Lea (2009) opined that the development of new shared equity mortgages (SEMs) that blur the lines between debt and equity would propel further advances in home ownership. Shared equity home ownership offers a more effective, resilient, and sustainable approach to asset building and economic advancement for lower income families.

Eligibility for Mortgage in Ghana

Most mortgage lending institutions in Ghana and beyond require borrowers to satisfy certain requirements before loans are advanced to them. This includes the following:

(a) Income verification: Applicants must provide proof of their gross monthly income by way of an employment contract (from employers), tax returns and three most recent pay slips. Other auxiliary incomes such as overtime, allowances and bonuses are not usually considered as part of gross income. Applicants who are self-employed are required to provide an income statement prepared by a qualified accountant. Again, bank statements, certificate to commence business and recent past three (3) years audited accounts may be required for self-employed applicants.

(b) Income Security: Applicants must be able to provide evidence of employment for a period of at least three years. Applicants who are not in formal employment should provide satisfactory evidence of their ability to sustain and even increase their declared level of income.

(c) Capacity to Service the Loan: Applicants should be able to provide complete and accurate information regarding their financial responsibilities and commitments. The applicant's monthly repayment obligation under the mortgage agreement must generally not exceed 40% of their gross income. Where the applicant has other existing loans, the combination of mortgage instalment plus other loans must not exceed 60% of the gross income.

(d) Credit Worthiness: Credit reference checks will be carried out on all credit facilities the applicant may have contracted. The mortgage lending institution must be satisfied that the applicant has a good credit rating before the mortgage is granted.

(e) Life Insurance: Depending on the particular circumstance and especially the age of applicant, life insurance coverage for the loan term may be needed. This insurance serves as additional security of capital for the mortgage lending institution, in the event of death of the mortgagor. If the mortgagor dies during the loan term, the life policy would absorb the outstanding mortgage debt hence liability, not passed to mortgagor's immediate family.

(f) Comprehensive Property Insurance Cover: The borrower shall be required to maintain a comprehensive insurance coverage for the replacement value of the mortgaged property. This is to safeguard against the suffering of excessive loss in the incidence of any contingencies.

(g) Identification: There is the need for the mortgagor to provide one passport sized photograph, personal reference form, and other forms of identification (voter's identification card or driver's license or passport or national identification card).

(h) Other documents: A valuation report by a certified valuation officer, clear land title documents and bills of quantities by recommended quantity surveyors are usually required depending on the mortgage product preferred by the mortgagor (BOG, 2012).

From the literature reviewed, the state of the Ghanaian mortgage market is arguably discouraging due to the fact that interest rates for mortgages are as high as 30%; this is almost a double of the 16% (Lea, 2010) base rate of Bank of Ghana. This, coupled with many unfavourable mortgage repayment plans has contributed to the failure of the Ghanaian mortgage system. The above situation has also been blamed primarily on low affordability levels as a result of low-income levels. There is therefore the rising need to work tirelessly to create an enabling environment and develop a Ghanaian friendly mortgage repayment plan to help salvage this situation.

METHODOLOGY

Research Design

The study used the mixed methods research design, employing both qualitative and quantitative research approaches. Creswell (2013) and Ampofo (2020) has made strong arguments for mixed methods research that offset the weaknesses of both quantitative and qualitative research as follows; that mixed methods research provides more comprehensive evidence for studying a research problem than either quantitative or qualitative research alone. The strategy permitted the usage of several approaches (Ampofo, Amoah & Peprah, 2020) and a triangulation of methods (Ampofo, 2019) in addressing the research issues.

Study Area

The study focuses on the supply side of the mortgage market in Ghana. It focuses deeply on the nature, types and constraints of the mortgage repayment plans in Ghana. The study examines the vital components of the mortgage repayment plans and the implications of those components on the development of the mortgage market. Experimental evidence in this report relate to the Accra metropolis where the researchers gathered most of the primary information. This was due to the fact that information concerning the mortgage market can be obtained at the lenders head offices in Accra.

Types of Data

Types of data for this study consisted of both primary and secondary data.

Primary Data

Both qualitative and quantitative data were collected for the purpose of this study. Qualitative data including mortgage repayment plans, types and nature were collected from the selected financial institutions under study: Ghana Home Loans (GHL), Home Finance Company (HFC), CAL Bank (Cal Mortgage), Stanbic Bank and Fidelity Bank. Quantitative data included house prices, interest rates, and mortgage terms. These were gathered to help make a thorough and reliable analysis on repayment plans used by the banks.

Secondary Data

Literature review was carried out to highlight related issues from previous works of other researchers. Secondary data from newspapers, journals, magazines, textbooks, internet (websites), articles and annual reports were used for the study. Secondary data collected included different mortgage repayment plans adopted by mortgage institutions in different economies, their characteristics as well as the history and operations of the mortgage institutions. Also, literature on the nature of the housing finance system adopted by other countries was consulted and used in this study. Furthermore, income levels were collated from the reports of the Ghana Statistical Service (GSS).

Sampling Design

There are many financial institutions in Ghana. However, for the purpose of this study, only mortgage banking/financial institutions in the mortgage industry formed the population under study. These were: Ghana Home Loans (GHL) (Head Office), Home Finance Company (HFC) Bank, CAL Bank (Cal Mortgage), Stanbic Bank and Fidelity Bank. This is deemed adequate since a similar study used only three banks in the mortgage industry (Mubarak, 2013). These are the major players in the mortgage loan business in Ghana. All the financial institutions who are into mortgage banking constituted the sample. Hence there was no need of sampling because the whole population was under study. This is because there are a limited number (5) of financial institutions that are into mortgage lending and all of them were interviewed. Hence, the sample size represented the identified population (the mortgage banks).

Data Collection Tools/Techniques

Both close-ended and open-ended questionnaires were used for this study. Open ended questionnaires were administered to the financial institutions to give their stated opinion deemed appropriate and relevant on mortgages and its related issues. Additionally, close-ended questions were administered to the financial institutions to choose the most appropriate from the possible answers.

The questionnaires were self-administered to mortgage/loan officers at the various institutions for reliable and exact information. Respondents were relatively given a chance to respond to questions at their convenient time given the busy nature of office schedules relative to the tedious nature of questionnaires which demand some couple of time.

Data Presentation Tools and Analysis

Data presentation was basically by descriptive and qualitative methods. Tables were used to present data. The data collected were, edited, coded and entered using tables to explain the results in relation to the research objectives. Qualitative data collected from the research was organized and presented in the form of comprehensive notes. Coding was used as an interpretive technique that organized the data and provided a means to introduce the interpretation. The coding technique required reading the data collected and demarcating segments within it. Each segment in the data was labelled with a code that suggested how the associated data segments informed the research objectives. The codes were used to discuss similarities and differences across distinct sources or comparing relationships between one or more codes.

RESULTS AND DISCUSSION OF RESULTS

Analysis of Demographics of Respondents

The mortgage lending institutions under study were; HFC Bank, Fidelity Bank, Ghana Home Loans, Cal Bank and Stanbic Bank. The background of these mortgage lending institutions are represented in Table 1.

Table 1

Background of mortgage lending institutions

INSTITUTION	Ghana Home Loans	Fidelity bank	H.F.C Bank	Cal Bank	Stanbic bank

FEATURES					
Year of establishment	2006	2006	1991	1990	1999
Mortgage products	Home Purchase Equity Release, Buy to Let, Home Improvement, Construction, Home Completion, Refinance, Land Purchase	Home Equity, Home Completion, Home Improvement and Employee Assisted	Home purchase mortgage, Home Equity Mortgage, Home Completion, Home Improvement, Buy, Build and Own a home	Home Completion, Home Improvement, Equity Release	Home Purchase, Developer Construction, Employee mortgage scheme, Equity Release, Refinancing, Home Improvement
Minimum down payment	20% of property value.	20-25% of property value.	20% of property value.	15% of property value.	20% of property value.
Age range (years)	18-65	18-60	18-60	21-55	21-60
Facility fee	1% of loan	Nil	Nil (for resident Ghanaians)	Nil	Nil
Processing fee	$200	1.5% of proposed loan	1.5% of proposed loan or $250	2% on loan amount	1.5% of proposed loan
Valuation fee	$300 - $500	Valuer's own charges	Valuer's own charges	Valuer's own charges	Valuer's own charges
Maximum loan	80% of property value.	75-80% of property value.	80% of property value.	85% of property value.	80% of property value.
Property insurance	0.2% of property value	Subject to insurance company	Subject to insurance company	Subject to insurance company	Subject to insurance company
Mortgage term	5-20 years	6-20 years	5-20 years	5-15 years	5-20
Interest rate	13% USD($) or 29% GH¢	14%USD($) or 29% GH¢	28%	27%	26%
Currency	USD($)	GH¢ /USD($)	GH¢ /USD($)	GH¢ /USD($)	GH¢

Source: Field Survey, 2016

From Table 1, all the five mortgage lending institutions have almost the same mortgage products. Also, three of the lending institutions require a minimum down payment of 20% except CAL bank and Fidelity bank that require a minimum of 15% and a maximum of 25% respectively. The lending institutions require an age range of 18-65 years to be eligible for a mortgage loan. Again, four out of the lending institution do not charge facility fee but charge origination fee for a maximum of 2%. The lending institutions charge valuation fees based on the discretion of the valuation officer. It is only Ghana Home Loans that charges from $300-$500 as valuation fees. Furthermore, a maximum of 75%-85% of the property value is advanced as loan to prospective mortgagors by the banks. Moreover, a maximum of 0.2% of property value is required as property insurance fee by the mortgage lending institutions, although property insurance value is also based on the discretion of the insurance companies. The mortgage repayment term for the mortgage institution ranges from 5-20 years with an interest rate of 13% -14% for US dollar loan and 26% -29% for Ghana cedis loan.

Nature of Mortgage Repayment Plans

Mortgage repayment plans used by the mortgage lending institutions under study is summarized in Table 2 below.

Table 2

Repayment Plans used in Ghana by the mortgage lending institutions

Mortgage institutions	Repayment Plans
Ghana Home Loans	Reducing balance method Variable rate method Fixed rate method
Fidelity bank	Fixed rate fixed payment method
H.F.C Bank	Reducing balance method Flexible rate method
CAL Bank	Adjustable rate method Fixed rate method
Stanbic Bank	Variable rate method Reducing balance method

Source: Field Survey, 2016

The repayment plans used by the various lending institutions represented in Table 2 above are designed and adopted to suit their clients' income levels and their ability to repay their mortgages conveniently. 4 out of the 5 banks use the fixed rate method which happens to be the most prominent repayment method that is commonly used to secure mortgagors against interest rate hikes.

Nature of the mortgage repayment plans

Every repayment plan has an exclusive nature. The three repayment plans (fixed rate, variable rate and reducing balance) are used by the lending institutions to provide alternatives for various income earners to ensure convenient and easy repayment of mortgages. Though there are general characters that each payment method exhibits, lending institutions have some varying nature and component to their types used. Each repayment plan has its respective flexibility and suitability component.

Table 3

The Nature of Mortgage Repayment Plans Used by the Lending Institutions

Mortgage institutions	Repayment Plans	Nature
Ghana Home Loans	Reducing balance method	Monthly payments are a component of interest and principal. Interest is higher in the first few years but rotates when client breaks even.
	Variable rate method	Monthly repayment of the loan varies depending on the prevailing rates in the market and duration of 15 years is given.
	Fixed rate method	Loan and interest amortization is usually equal periodic installments for a maximum of 20 years. The repayment is computed based on an agreed contractual rate which cannot be varied until the contract is abrogated or re-negotiated.
Fidelity bank	fixed rate fixed payment method	Principal and interest payment is fixed for a maximum term of 20 years.
H.F.C Bank	Reducing balance method	The interest is computed on the principal balance that reduces with repayment of each loan installment.

	Flexible rate method	It allows the borrower to pay initial lower monthly installment using 30%-35% of his net income. Repayment is increased by a specified percentage each year to fully amortize the loan. Periodic repayment is increased due to increment of borrower's income.
CAL Bank	Adjustable rate method	This is an interest rate charged on 45% of the borrower's net income and varies depending on the market rate.
	Fixed rate method	This is a high interest rate instrument specifically offered to individual client with a monthly salary above GH₵5000.
Stanbic Bank	Variable rate method	Monthly repayment of the loan varies depending on the prevailing rates in the market and a maximum term of 20 years is given
	Reducing balance method	The interest is computed on the principal balance that reduces with repayment of each loan installment.

Source: Field Survey, 2016

Strengths and Weaknesses of MRPs

The mortgage repayment plans used by the lending institutions has their own pros and cons. The pros and cons cuts across all lending institution for any repayment method(s) used. With the fixed rate payment method, lenders are certain of the exact amount borrowers are expected to pay periodically but it is disadvantageous in times of rising market rate because it devalues the lenders mortgage capital value when market rate rises. Again, the reducing balance reduces the principal balance periodically but the higher initial repayment makes it expensive in the short-run. Also, the adjustable rate method is used during market rate fluctuation to ensure borrowers repay their mortgages conveniently in response to the current market rate, although a high rise in market rate can result to borrowers default**.**

Table 4

Strength and Weakness of the Mortgage Repayment Plans

MRPs	Strengths	Weaknesses
Fixed rate	• Lenders are secured of monthly payments as it is exactly known by borrowers of how much to pay periodically. • Lenders will be certain about their mortgage payment since payment is fixed	• In times of rising market interest rates, mortgage values of lenders are devalued
Reducing balance	• This approach quickly reduces the principal balance of the loans hence the ability of the mortgagor to prepay. • The approach enables the mortgagor to repay the loan due to reduction in principal balance overtime	• Higher initial repayment makes this plan expensive in the short-run
Adjustable / Variable rate	• Mortgage rates adjust with rising market rate. This does not bring about a fall in value of the mortgagees capital. • Interest rate risk is born by borrowers	• High rise of market interest rate will lead to default due to the increment of borrowers' monthly payment. • A fall in interest rate leads to a fall

		in mortgage value. This therefore put lenders capital at risk.

Source: Field Survey, 2016

Mortgage Underwriting criteria of financial institutions

The basic underwriting requirements indicated by each responding institution are presented in Table 5 below.

Table 5

Underwriting criteria for the mortgage lending institutions

Institution	Underwriting Criteria
Ghana Home Loans	• Payment –to- income ratio • Loan to value ratio • Ability/willingness to pay • Total commitment • Credit history • Both Ghanaian and Non Ghanaian resident
Fidelity Bank	• 18yrs and above • Verifiable employment and income
Home Finance Company Bank	• Payment –to-income ratio • Credit worthiness • Loan-to-value ratio
CAL Bank	• Loan-to-value ratio • Age 21-55 • Credit history • Payment-to-income ratio
Stanbic Bank	• You need to be over the age of 21 but not more than 60 years by facility maturity • A Ghanaian citizen or permanent resident of Ghana • Existing Stanbic Bank customer • Be permanently employed continuously for at least 2yrs • A non-account holder need to have a workplace banking schemes

Source: Field Survey, 2016

Table 5 above presents the underwriting requirements of each lending institution. All the five lending institutions consider the mortgagor's payment to income ratio, loan to value ratio, credit history or worthiness as common criteria for mortgage underwriting in Ghana. Only Fidelity bank gives the opportunity to both Ghanaian and non-Ghanaian residents to qualify for a mortgage. A non-account holder in order to qualify for a mortgage at Stanbic bank would need to have a working banking scheme and also be permanently employed continuously for at least two years. Although age range of 18-25 years qualifies a person for a loan (per the banks criteria for eligibility), persons within this age group would rationally not go in for a mortgage looking at their level of income. Although there are similarities in the criteria used by the various banks, it is realized that each lending institution has something peculiar. This makes the Ghanaian mortgage underwriting system not standardized.

SUMMARY OF MAJOR FINDINGS

The objective of this study was to analyse the mortgage repayment plans in Ghana. The study found out that the reducing balance, fixed rate and the variable repayment methods are used by the mortgage lending institutions in Ghana. These are designed and adopted to suit their clients' income level and their ability to repay their mortgages conveniently. The fixed rate method is the commonest method used in Ghana and the other repayment plans evolved from the fixed rate repayment plan

CONCLUSIONS

Based on the findings of this study, it can be concluded that the fixed rate payment method is generally used and the other three (3) evolved from the fixed rate. Although various repayment plans were provided by the lending institutions to ensure flexibility in payment according to the income levels of their clients. There is therefore the rising need to work tirelessly to create an enabling environment and develop a Ghanaian friendly mortgage repayment plan to help salvage this situation.

RECOMMENDATIONS

The findings show that the mortgage repayment methods used in Ghana currently is not favoring the low- and middle-income households because prices of contractor – built units are too high. The situation can be improved upon and mortgage repayment made affordable if the interventions discussed below are considered.

- The government must double its efforts at stabilizing the economy by improving the cedi's performance against the US dollar and reducing inflation. With these factors improved and the economy stable, investment in the mortgage market would be improved since risk levels would be lowered. It is therefore important for policy makers to focus on stabilizing the macro-economic environment.
- A change in market interest rate is a constraint to mortgage lending institutions especially when market interest rate rises with the fixed rate payment method. There should be an existence of a secondary mortgage market where mortgagees can sell their mortgage obligations in order to manage this interest rate risk.
- There is the need for further studies to develop new repayment plan(s) that may increase affordability and reduce strains on income qualification requirements. It will be of relevance for further research in mortgage pricing, mortgage demand, affordable housing provision and capital market development. A careful assessment of these related areas of research would help develop a workable mortgage finance system for Ghana.

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