

THE INFLUENCE OF SOCIOECONOMIC STATUS OF HOUSEHOLDS ON HOUSE OWNERSHIP IN THE BUEA MUNICIPALITY

¹Ncho Fabian Ntah, ²Njimanted Godfrey Forgha

¹M.Sc. Economics, University of Buea, Cameroon

²(PhD), Associate Professor of Economics and Quantitative Methods,
Director of Studies, Higher Technical Teacher Training College, University of Bamenda, Cameroon

Abstract: This study investigated the influence of socioeconomic status of households on house ownership in the Buea municipality. Based on the hypotheses that demographic factors, income and Mortgage market innovation have no significant effect on home ownership, data were collected with the aid of questionnaire from a sample of 450 households in the Buea Municipality in the year 2015. The logit regression model was used to formulate the technical links associated with the variables. The result showed that demographic factors, income, and Mortgage market innovation, positively influence households' ability to own houses. The results were statistically significant at 1%, 5% and 10% levels of significance except for gender and education level variables which were insignificant. Furthermore, region of origin variable was negative and statistically significant indicating that households from other regions were more likely to be house owners as opposed to households with South West origin. It was also found statistically that diaspora remittances contributed to households' home ownership significantly in the Buea Municipality. We concluded that the socioeconomic status of households significantly influence house ownership in the Buea Municipality. The study recommends the need for more innovation in the mortgage market for greater visibility and ease of access to housing loans by way of reduced loan requirements, creation of one-stop-shop to expedite the process of obtaining building permit and land title documents, and more awareness campaigns on housing loan availability.

Keywords: House/home Ownership, Household, Mortgage Market Innovation.

1. INTRODUCTION

The effect of socioeconomic status of households on house ownership has been widely investigated in empirical literature. Studies such as those of Andrews et al., (2011), Guillaume et al., (2014), and Africa Housing Finance Yearbook 2014, have reported that house (home) ownership rates have increased significantly in many countries of the world in recent years both in the Developed and Less Developed Countries. Even though the net effects of home ownership are unclear, home ownership has been a public policy goal for most countries in Europe and America. For instance, the United States of America have extensively pursued higher home ownership rate over time. In 2002, President Bush outlined "a comprehensive agenda to help increase the number of minority homeowners by at least 5.5 million before the end of the decade", while in 1994, President Clinton requested an "... effort to dramatically increase home ownership in USA over the next six years", (Stuart and Rosenthal, 2004). Home ownership rates have generally increased, particularly in Canada 68.9 percent, United Kingdom with 70.7 percent, Norway with 85 percent, Spain with 79 percent and Greece with 76 percent (Andrews et al., 2011 and Guillaume et al., 2014).

In Africa, home ownership development have recently been at the forefront of public policy discussions in many countries like Cameroon, Nigeria, Kenya, Tanzania, among others (Africa Housing Finance Yearbook 2014). Home ownership in Africa has evolved tremendously with the experience of economic growth, growing population estimated at 1.166 billion people and rapid urbanization estimated at 3.5 percent per year, (World Population Review, 2015). So too, the housing finance sector in Africa has witnessed considerable growth and changes in the past decade as reported in the Africa Housing Finance Yearbook 2014. On like in the past where owning a house was the sole concern of the individual or household, today governments and real estate developers are moving in to build low cost social houses for its citizens. The advent of investors, developers and financiers in the provision of affordable housing in the continent such as: the Housing Fund Loan for Cameroon, Delta Imobiliaria for Angola, the National Housing Fund for Djibouti, Addoha for Morocco, National Hosing Corporation for Kenya, among others, has greatly increased the number of home ownerships with the African middle-class burgeoning, (Africa Housing Finance Yearbook, 2014). This is further made possible through African diaspra remittances, as well as Foreign Direct Investment to Africa.

In Cameroon, an estimated 53 percent of households own their homes, 30 percent are tenants and 11 percent are accommodated free of charge (Africa Housing Finance Yearbook, 2014). Cameroon has an estimated population of 23 million, with 39.9 percent of its population below national poverty line, an urbanised population of 53.25 percent, and with an unemployment rate of 3.8 percent (Cameroon National Institute of Statistics, 2014). Given the annual population growth rate of 2.64 percent and an annual urbanization growth rate of 6.5 percent, the country is challenged by the absent of decent housing to accommodate this growing urbanized population. In view of the above statistics and the rapid urbanization of major Cameroon's cities like Douala and Yaoundé, including Buea, the country is reported to have a significant housing shortage of 100,000 per annum (Africa Housing Finance Yearbook, 2014). This is partly justified by the fact that only about two percent of Cameroonians have access to mortgage from the formal mortgage institutions, and couple with very low households' income and high unemployment rate.

As a matter of policy, the government of Cameroon has made substantial effort to curb the housing challenge by injecting funds through its established institutions such as: the Cameroon Real Estate Corporation (SIC) founded in 1952, the Housing Loan Bank (Crédit Foncier du Cameroon - CFC) created in 1977, and MAETUR in charge of land development and equipment, and with the creation of the Ministry of Urban Development and Housing in 1979 charged with defining and implementing Government policy (Crédit Foncier du Cameroon, 2015). Yet, the housing shortages persist. At individuals' level, households have made effort to augment their salaries/incomes by indulging in small scale businesses and others have send children or family members abroad to work and remit income to family back home in a way to meet up with shelter need. Despite all these efforts, housing shortage persist.

The Buea Municipality is not left out of this housing shortage. Information gathered from the Buea Council reveals the high demand for houses over the past five years from the year 2010 with an estimated 60 percent increase in the demand for land and building permits from 2012 to 2015 with the possibility of greater increase in the near future (Buea Council, 2015). The high demand for lands and building permits are indicators of the desire for people to own houses. The increase in demand can be attributed to changes in the socioeconomic condition of individuals and households to include; demographic, income levels, diaspora remittances and public policy on mortgage market innovations. Given the persistence of housing shortage, this study therefore seeks to establish the determinants of home ownership in the Buea Municipality which in turn could be use to inform policy on alternative ways to increase home ownership rate in the Municipality and the country at large.

In addition to affirming some established demographic determinants of home ownership in literature, this study has expanded the literature base with the inclusion of new variables such as; the region of origin, mortgage market innovation, and the diaspora remittances, which have had little or no empirical literature particularly for Cameroon. These are important gaps which are addressed in this study. This study adopts the logic regression model for reasons of its simplicity of used in primary studies and its strength in capturing binary dependent variable.

This work is organized in five sections with section one covering the introduction above. Section two comprises the literature review relevant to the study, section three looks at the methodology employed, the findings are presented and discussed in section four and the study ends with section five by presenting the policy recommendation and conclusion.

2. LITERATURE REVIEW

Concepts reviewed in this study are those of tenure choice, home ownership, diaspora remittance, mortgage market innovation and region of origin. Home ownership has been argued to provide the most stable tenure arrangement to satisfy basic household needs and promote a more active and informed citizenry (Di Salvo and Ermisch, 1997). Accordingly, Haurin et al., (2002), and Stuart et al., (2004)), reported that home ownership was playing an increasingly important role in maintaining the standard of living of households. For instance serves as retirement homes for the old, strengthens families, stabilizes communities and also that low residential mobility resulted in better education for children and higher income in the future.

Some of the studies reviewed included studies by Bourassa and Yin (2008) in USA, Xia (2011) for China, Antonio (2012) in Mexico, Adams (2013) for Africa Diaspora remittances, Guillaume et al., (2014) for Belgium, Chukwuma et al. (2015) for Nigeria, Gyorko and Linneman (1997) , Drew and Herbert (2012), Hoods (1999), Glaeser and Shapiro (2002), all in Europe and America. All of these empirical studies were carried outside Cameroon and most of the studies used secondary data for its analyses. Studies for Cameroon were merely surveys on home ownership situation and have never concentrated on evidence in Buea.

This study make use of the micro economic theories of consumer choices such as; the life-cycle hypothesis, the permanent income hypothesis, the relative income hypothesis and the human capital investment theory (Michael T., and Stephen C. S., 2011), developed by economists to explain consumption and saving patterns or behaviours of individuals and households. All four theories tries to uniquely provide explanations to consumer consumption choices at a point in time and while individuals or households make decisions based on perceived demographic and economic status.

Micro Economics theory of consumption regards home ownership as durable consumer good (consumer wealth or assets) whose streams of benefit or return is continuous and whose consumption is a function of households' disposable income and other determinants which are grouped under demographic and economic status variables. Adapted from the Keynes' consumption theory, the home consumption function was stated as follow:

$$Ch = f(Y_d, M, F, S, A, D, MMI, RO) \dots\dots\dots 2.2.3$$

Where, Ch is home consumption, Y_d is the disposal income of household, M is marital status, F is the Family size, S is sex, A is age of household head, D is Diaspora influence, MMI is mortgage market innovation and RO is the region of origin.

3. METHODOLOGY

This study was limited to examining the influence of socioeconomic status of households on the home ownership situation in the Buea Municipality and was conducted in the year 2015. The study was a primary study and employed the use of questionnaires for data collection so as to obtain the most accurate and current data on home ownership situation in the Municipality. For purposes of ensuring controllability, accurate investigation and measurability of variables, the study was limited to some demographic and economic variables of home ownership and included; marital status, family size, age, level of education, the region of origin, income, mortgage market innovation, and the diaspora remittances (income from family members abroad).

The study makes use of cross-sectional research design. The design was best suited for the study as it best captures individual households' motives for home ownership or non home ownership at a given point in time and its usefulness in establishing causal effect and comparisons among various population segments (Wong, 1996, cited in Xia, 2011). The questionnaire used was structured into three sections: Section A captured basic information of the respondents including the socio-economic background of the respondents, section B captured home owners' information with the focus of capturing the motive for home ownership and section C captured non-home owners' information with the motives for understanding the reasons for not owning a house.

The study targeted household heads (irrespective of marital status) who were independent and age above 18 years of age. For the sample size, the study assumed a 95 percent confidence interval (z) and an estimated sampling error (e) of 5% based on the formula by Zikmund (2003). The total population (N) of the Buea Municipality is estimated at 250,000 inhabitants (2011 estimate). Based on the Zikmund formular, the sample size (n) was calculated as follows:

$$n = \frac{N}{1+N(e)^2} = \frac{250000}{1+250000(0.05)^2} = 399 \cdot 36 \approx 400$$

This gave an approximate sample size of 400, at a 95% confidence level with an error margin of 0.05.

Data was collected using a questionnaire designed to capture both qualitative and quantitative data. Question type consisted of closed-ended and open-ended format. To facilitate the process of data collection, the researcher recruited five trained research assistants. In sum, 500 questionnaires were administered but received feedback from 450 respondents. This gave a respond rate of 90 percent. The research instrument was checked for reliability, face and content validity.

The study used a single-equation logit model. A logistic model allows the dependent variable to remain within the range (0, 1), where 1, denotes home ownership while 0, denotes non-home ownership. The logit model was used to estimate the parameters of the model. Specifically, the logit is defined as the natural logarithmic value of the odds in favour of a given event, that is: μ_i

$$L_i = \ln\left(\frac{p_i}{1-p_i}\right) = \beta_0 + \beta_1 X_i + u_i \dots\dots\dots(3.1)$$

This model is based on the cumulative distribution function Pi:

$$p_i = E(Y = 1 / X_i) = \frac{1}{1+e^{-(\beta_0+\beta_1 X_i)}} \dots\dots\dots(3.2)$$

$$p_i = \frac{1}{1+e^{-Z_i}} = \frac{e^z}{1+e^z} \dots\dots\dots(3.2.1)$$

Where:

$$Z_i = \beta_0 + \beta_1 X_i \dots\dots\dots(3.2.2)$$

The ratio $P_i/(1-P_i)$ in equation 3.1, represents the odds ratio, that is, the odds that an event occurs ($Y=1$) to the odds it does not occur ($Y=0$); P_i is the probability that the output variable be equal to one ($Y=1$); X_i are the input variables (explanatory variables); e is the base of the natural logarithm. β_1 is the slope and measures the change in L for a unit change in X . β_0 is the intercept, the value of the log-odds in favor of owning a house if income for example is zero.

Based on reviewed literatures and theories, the following model was specified to predict the probability of home/house ownership:

$$H_0 = f(A, G, MS, EDU, INCOM, FS, MMI, RO) \dots\dots\dots 3.3$$

Where; H_0 is home ownership status of households, A is age of respondent, G is gender, MS is marital status, EDU is a measure of level of educational attainment, $INCOM$ is a measure of the household's income, FS is family size, MMI is mortgage market innovation reflecting government policy, and RO is the Region of origin of the respondent.

The function was econometrically stated in its a priori as:

$$\ln [P/(1-P)] = \beta_0 + \beta_1 A + \beta_2 G + \beta_3 MS + \beta_4 EDU + \beta_5 INCOM + \beta_6 FS + \beta_7 MMI + \beta_8 RO + \mu \dots\dots\dots 3.4$$

Where, P is the dependent variable, the probability of owning a house and $1-P$ is the probability of not owning a house, while β_1 to β_8 are variables' coefficient and μ is the error term.

The effect of income from the diaspora (diaspora remittances) was analyzed through descriptive statistics to ascertain its influence on home ownership. Remittances from family members abroad augment households' income that can increase preferences for home ownership.

4. PRESENTATION OF RESULTS

The findings of this study are presented in two parts; descriptive statistics by use of frequency tables, and the logistic regression results. The first part based on frequency tables was further categorise into two sections; the responses from house owners and the responses from non house owners.

4.1 The Outcome of the Responses from both House Owners and Non House Owners are Presented below.

Of the 500 administered questionnaires, 450 were returned which gave a 90 percent return rate. Three key questions were set out to ascertain home ownership situation for Buea Municipality. The first question seeks to investigate the number of house owners as against non house owners. From a sample of 450 households or respondents, 193 (42.9 percent) accepted they own a house as against 257 (57.1 percent) who said they do not own a house. This was followed by a second question on their awareness of housing loan availability in Cameroon. It was found that 52.7 percent respondents said they were aware and 47.3 percent said they were not aware. It can be deduce from this statistics that the percentage of those still unaware is large. The last question seeks to have respondents' opinion on housing loan accessibility. It was found that 5.6 percent reported it was accessible, 34.4 percent reported it was accessible but too complicated in terms of its procedures, 3.1 percent said it was not accessible while a gross majority 56.9 percent reported they had no idea on its accessibility. It therefore implies that though a good proportion of the respondents said it was accessible but too complicated, a majority have never venture to approach housing loan institutions and so have no idea on its accessibility.

4.1.1 Responses from House Owners:

Table 4.1: Distribution by Source(s) of Home Ownership

My House is an inherited property (A)			If not inherited, was house ownership financed from personal savings (B)		Received remittances from family member(s) abroad for house construction / purchase (C)		Applied for a housing loan (D)	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	17	8.8	140	79.5	32	18.2	89	46.1
No	175	90.7	36	20.5	119	67.6	103	53.4
Missing	1	0.5	0	0	25	14.2	1	0.5
Total	193	100	176	100	176	100	193	100

Source: Computed by Author using SPSS version 17, (2015).

Table 4.1 present statistics of house owners with respect to the means of acquisition of the house. In the first column - column A, 17 out of 193 home owners responded that their houses were an inherited property, while 175 households reported that their houses were not an inherited property, that is, 90.7 percent. One person did not respond to this question and is indicated as "missing". Furthermore, of those whose homes were not inherited - column B, 140 agreed that their house ownership were finance from their personal savings, representing 79.5 percent, while 36 households responded 'No', meaning that their houses were not (solely) financed from personal savings, and this represent 20.5 percent. Also, Column C reported on whether their house ownership was supported with remittances from family members abroad. Out of 176 respondents, 32 or 18.2 percent agreed that they received remittances abroad that supported their house purchase or construction, while 119 or 67.6 percent respondents disagree. Again, some 25 or 14.2 percent respondents did not take part in this question and were presented as 'missing'. For the last column - D, which interrogated house owners to know if their home acquisition were finance with a housing loan they applied for, 89 (or 46.1 percent) respondents agreed that they did apply for housing loan while 103 (or 53.4 percent) of home owners reported that they have never applied for a housing loan. One house owner failed to respond to this question.

As a follow up question to the 89 respondents who applied for housing loans, they were further asked to indicate the source of housing loan finance. Four financial institutions were shortlisted which included: Credit Foncier du Cameroun (CFC) which is a state mortgage financial institution, Commercial Banks (CB), Credit Unions (CU) and Non Institutionalised Finance institutions- NIFI (e.g, 'Njangi Houses'). From the findings it was observed that of the four different financial institutions, most of the respondents (37.08 percent) reported that they obtained housing loans from Non Institutionalised Finance Institutions (commonly called 'njangi houses' or 'contri meeting'). This was followed by 21.35 percent of those who applied from the state own's mortgage financial institution (Credit Foncier du Cameroun - CFC), 20.22 percent applied from Credit Union and 19.1 percent applied from Commercial Banks. The statistics therefore implied that respondents found it convenient obtaining housing loans from the Non Institutionalised Finance Institutions than from the other formal institutions. Some of the justification for this choice is surrounded on the housing loan requirements as analysed in table 4.2 below.

Table 4.2: Comparative Analysis of Housing Loan Finance Institutions against the lone State Mortgage Finance Institution (CFC)

Question type	Response	CFC		CB		CU		NIFIs e.g. Njangi		Total Frequency	Total percent
		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent		
How easy was it to apply for housing loan?	Very easy	0	0	4	23.5	1	5.6	17	51.5	22	20.2
	Fairly easy	3	18.75	7	41.2	5	27.8	16	48.5	31	34
	Not easy	7	43.75	6	35.3	12	66.6	0	0	25	36.4
	Not at all Easy	6	37.5	0	0	0	0	0	0	6	9.4
	Total	16	100	17	100	18	100	33	100	84	100
Were you required a land title in your loan application?	Yes	14	87.5	12	70.6	5	27.8	0	0	31	46.5
	No	2	12.5	5	29.4	13	72.2	33	100	53	53.5
	Total	16	100	17	100	18	100	33	100	84	100
If a land title was required, how long it took to obtain the land title?	1 month	0	0	0	0	0	0	0	0	0	0
	2-5 months	2	14.3	2	16.7	0	0	0	0	4	7.75
	6-12 months	8	57.1	9	75	5	100	0	0	22	58.025
	above one year	4	28.6	1	8.3	0	0	0	0	5	9.225
	Total	14	100	12	100	5	100	0	0	31	75
Was the housing loan actually used for house construction without part deviated to elsewhere?	Yes	12	75	14	82.4	13	72.2	32	97	71	81.65
	No	4	25	3	17.6	5	27.8	1	3	13	18.35
	Total	16	100	17	100	18	100	33	100	84	100

Source: Computed by Author using excel spread sheet, (2015).

Where, CFC is Crédit Foncier du Cameroun, the lone state mortgage finance institution in the Municipality of Buea; CB is Commercial Banks; CU is Credit Unions; and; NIFIs is Non Institutionalised Financial Institutions (commonly referred to as 'Njangi Houses' and/or 'Contri meeting').

Table 4.2 presented statistics of respondents with respect to the ease of obtaining housing loan from the various financial institutions, the loan requirement and the duration taken to obtain the land title. The comparison clearly indicated that for CFC, the ease of obtaining housing loan, the loan requirement and the land title duration (in terms of time and procedures to follow), were more challenging for CFC than with other non state financial institutions. Most of the non state financial institutions did not require land title as a requirement for housing loan and this made the process easier and less costly particularly as obtaining a land title was reported to take a longer duration. This analysis was important in that as the government target to reduce the housing shortage of 100,000 per year, its policy to provide housing loan should take into consideration some of the above issues. For instance, with regard to the question of how easy it was to apply for housing loan, 81.25 percent of the home owners who took housing loans from CFC reported that it was not easy to obtain a housing loan from CFC, whereas for non state financial institutions, overall 54.2 percent respondents reported that it was easy obtaining housing loans. Same goes for loan requirement and the land title duration.

It was therefore noted here that duration for obtaining land titles was crucial in the process of applying for housing loan. It requires consideration when looking at mortgage market innovation. The duration of 6-12 months reported here is observed as quite lengthy and may simply stop many from not obtaining housing loans and consequently limit their ability to own houses. With innovation in the housing loan value-chain, it is expected that more people should own houses with building permits, increase access to building loans, decrease processing fees or charges, and flexible loan requirements.

Table 4.3: Distribution by Cost of Obtaining Housing Loan Requirements, and Loan Charges

Statements	Distribution	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree	Missing	Total
It is very costly to obtain Land Title	Frequency	128	35	25	3	0	2	193
	Percent	66.3	18.1	13	1.6	0	1	100
	Total	163		25	3		2	193 (100)
It is very costly to obtain a building permit	Frequency	34	86	48	19	4	2	193
	Percent	17.6	44.6	24.9	9.8	2.1	1	100
	Total	120		48	23		2	193 (100)
Lengthy procedure to obtain building permit	Frequency	27	72	72	19	1	2	193
	Percent	13.9	37.3	37.3	9.9	0.6	1	100
	Total	99		72	20		2	193 (100)
Lengthy procedure to obtain land title	Frequency	103	66	16	6	0	2	193
	Percent	53.4	34.2	8.3	3.1	0	1	100
	Total	169		16	6		2	193 (100)
Loan charges were exorbitant	Frequency	24	64	83	17	0	5	193
	Percent	12.4	33.2	43	8.8	0	2.6	100
	Total	88		83	17		5	193 (100)

Note: * = sum percent for 'strongly agree' and 'agree';

** = sum percent for 'disagree' and 'strongly disagree'.

Source: Table computed by Author using excel spread sheet, (2015).

Table 4.3 presents statistics of responses to statements in the likert scale format. The respondents express their level of agreement with each statement stated. With regard to the first statement which state; “it is very costly to obtain land title”, of a sample of 193 home owners, we found in total that 163 (84.4 percent) of home owners respondents agreed that it was costly to obtain land title and 3 (1.6 percent) respondents disagreed, while 25 (13 percent) respondents were indifferent. This by implication means that it was really costly to apply for land title in the Buea Municipality and Cameroon at large since the same process mechanism and procedures are defined / stipulated by the government. For the second statement which states that ‘it is very costly to obtain building permit’, cumulatively, 120 (62.2 percent) respondents agreed that it was very costly to obtain a building permit in the Buea Municipality, 48 (24.9 percent) respondent were indifferent, while 23 (11.9 percent) said they disagree with the statement.

Furthermore, an inquiry on the procedures taken to obtain building permit, 51.3 percent respondents generally agreed that the procedures to obtain building permit were lengthy while 10.4 percent respondents says that the procedures were not lengthy, and 37.3 percent respondents were indifferent. Also, for the procedures for obtaining land title, cumulatively, 87.6 percent respondents agreed that the procedures were lengthy, 8.3 percent were indifferent and only 3.1 percent said the procedures were not lengthy. Finally, respondents were asked if they feel loan charges for housing loans were exorbitant. Of the 193 respondents, in sum 45.6 percent reported loan charges were exorbitant, 43 percent were indifferent, and while only 8.8 percent reported loan charges were not exorbitant.

In all of the responses to the different question types, we see that there is still need for innovation in the mortgage institutions to increase accessibility and encourage households to go for housing loans.

4.1.2 The Responses of Non House Owners:

On the other hand, data for non house owners was analysed to ascertain the respondents’ level of agreement with statements for not owning a house. Of the 257 sampled of non house owners in the Buea Municipality, it was found that in sum (those who strongly disagree and those who disagree), 97.6 percent of the respondents disagree with the statement that “I just do not want to construct or buy a house”. This implies that most of the respondents were interested to own a house but other constraints have limited their wiliness. Only 1.6 percent agrees with the statement and 0.8 percent was indifferent. As a follow up statement to verify possible reason for not owning a house, they were ask if their non house ownership was due to “high cost of house construction or high purchase price”. It was found that in sum (summation of those who strongly agree and those who agree) 70 percent of the respondents agreed with the statement. 17 percent of the respondents disagree with the statement and 11 percent were indifferent. It means that most respondents hold the opinion that house construction or house purchase was expensive.

Further information on the level of agreement with statements as other possible reasons for not owning a house by non house owners was analysed and presented statistically. With regard to the statement that “costly and lengthy procedures to obtain building permit”, of the 257 non house owners, in sum 99 (38.3 percent) non house owners agreed with the statement as one of the reasons for not owning a house, 122 (47.5 percent) were indifferent with the statement and 36 (14 percent) did not agree with the statement as a possible reason for their non house ownership. Again, with the statement that “costly, lengthy procedures and duration to obtain land title”, of the 257 non house owners, 189 (73.5 percent) of them agreed that their non house ownership was partly attributed to the high cost, lengthy procedures and duration involve in obtaining a land title which is a pre-requisite for mortgage housing loans. However, 13 (5.1 percent) of the non house owners disagree with the statement, meaning that it was not a justified reason for them not owning a house.

Also, with the statement for “high loan charges”, aggregately, 39.3 percent of sample non house owners agreed that high loan charges accounted for their non house ownership, 53.3 percent of the respondents were indifferent while 7.4 percent disagreed, meaning that it was not a reason for not owning a house. Again, with the statement that “not qualify for a loan”, aggregately, 26.5 percent of the respondents agreed that they were not qualified for a loan, perhaps meeting up with collateral requirements. 34.2 percent respondents were indifferent and 39.3 percent respondents disagree, meaning that they were qualified for a loan. With regard to the statement that “have other loan commitments”, in sum, 47.1 percent agreed with the statement. In other word, they are engaged in other loan commitments like school fee loans, car loans, business loans, among others. Thus, limit their access to housing loans. Also, 14.4 percent non house owners indicated indifferent with the statement, while 38.1 percent of the respondents disagreed, meaning that they do not have other loan commitments but were simply not interested for a housing loan.

Finally, with the statement “no stable source of income”, of the 257 non house owners, in sum 49.8 percent agreed that they do not have a stable source of income. This could possibly be as a result of the high unemployment rate in the country reported at 39.9 percent. In other word, they do not have a stable income sources and this limits their access to housing loans. Also, 5.8 percent of the respondents were indifferent, while 44 percent disagreed with the statement, meaning that they have a stable source of income but yet do not own a house, perhaps due to other possible reasons other than the source of income. One person was recorded as missing representing 0.4 percent.

From an open ended question posed to non house owners to have their opinions as to other reasons for their non house ownership, the most frequently cited reasons as stated in descending order were; insufficient/low salary package, low incomes, huge family responsibilities, unemployment, ill health, high cost of land purchase price, high cost of living, not ready to own a house, and due to separate home in the case of divorces.

4.2 Regression Results:

Table 4.4: Presentation of the Regression Results

Convergence achieved after 5 iterations					
Number of obs = 391					
Wald chi2(8) = 112.13					
Prob > chi2 = 0.0000					
Log pseudolikelihood = -180.59472					
Pseudo R ² = 0.3336					
Dependent variable: House/home ownership					
Logistic regression		Odds Ratio	Marginal Effect After Logit	P> z	X
Home ownership (Yi)	Coefficient	Coefficient	dy/dx		(mean)
Age- A	0.3152094	1.370546	0.0787959	0.026**	3.11253
Gender - G	0.1240122	1.13203	0.0309929	0.670	.68798
Marital status - MS	1.236628	3.443982	0.2929774	0.000 *	0.769821
Educational - EDU	0.1633253	1.17742	0.040828	0.347	3.32481
Income - INCOM	0.7527695	2.122871	0.1881769	0.000*	1.84399
Family size - FS	0.5246752	1.68991	0.131158	0.004*	2.47826
MMI	2.052074	7.784032	0.4510267	0.000*	0.2711
Region of origin - RO	-0.518478	0.5954261	-0.1287489	0.072***	0.332481
cons	-5.615604	0.0036406		0.000 *	

*, ** and *** represent 1%, 5% and 10% level of significance, respectively.

Source: Computed by Author with Stata 12, (2015).

Table 4.4 present the coefficients of the logit regression model, the odds ratio, the P-values and the mean for the different explanatory variables. The dependent variable is “home ownership (Yi)”. The Pseudo R² of 0.3336 is low and measures the overall goodness of fit of the regression model. However, R² is not so much meaningful in binary response regression model as the dependent variable takes on two values 0 or 1. As such, the computed R² is likely to be much lower than 1 and most often ranges between 0.2 to 0.6, Gujarati (2004). Based on this, R² interpretation is not over stressed in this study as Aldrich and Nelson, (1981), contend that “the use of the coefficient of determination as a summary statistic should be avoided in models with qualitative dependent variable”. What matter are the expected signs of the regression coefficients and their statistical and/or practical significance. In this case, it is positive and significant at 1 percent level, indicating some degree of fit.

Interpreting the logistic regression results on table 4.4, it was found that the age coefficient was positive meaning that there was a more likelihood for an older person owning a house than not owning a house. The age coefficient of 0.315 means that, holding other variables constant, if age of the household head increase by one year, on average, the estimated logit increases by about 0.315 unit, indicating a positive relationship between age and house ownership. The result was statistically significant at 5 percent level of significance. The implication is that if a household head age was to increase by one year, the log-odds of owning a house relative to not owning a house increases by 1.371 units, holding other variables constant. With regard to the Marginal Effect after Logit, if the age of the household head is increase by one year, the probability of that individual owning a house increases by 7.9 percent.

Gender has a positive effect on the logit with a coefficient of 0.124 units, with female as the base. The result implies that there is a more likelihood for male sex to own a house than the female counterpart. That is, the log of odd in favour of owning a house increases for male sex as opposed to females by 1.132 units, which is approximately 13.2 percent higher. However, the result was insignificant even at 10 percent level. The justification for the insignificant of the result was partly because gender variable was not given so much consideration during data collection as the respondents in the case of married households were based on the availability of either the household head – the male (husband), or the next household head – the female (wife). Thus, the gender variable interpretation was not given so much importance in this study. The marital status coefficients of 1.237 means that individuals who were married, were more likely to own a house than single individuals. Single individuals were considered the base. If an individual marital status changes from single to married, the log-odds in favour of owning a house increases by 3.444, and is significant at 1 percent level of significance. For the marginal effect, if an individual were to change status from single to married, the probability for the individual to own a house is increased by 29.3 percent.

Also, the coefficient for education attainment was positive indicating that the higher the level of education attained by the household head, the likelihood for the household owning a house increases by 0.163 units, as opposed to a household head with no education. The implication is that if a household head's education increases by one level, the log-odds in favour of owning a house relative to not owning a house increases by 1.177 units. The result for marginal effect after logit shows that the probability to own a house increases by 4.1 percent for an extra level of education attained. The coefficient for income, family size, and mortgage market innovation are all positive implying that an increase in household income, family size with regard to increase number of dependent children, and more innovation in the mortgage market, the likelihood to own a house increases by 0.753, 0.525, and 2.052 units respectively. The results are all statistically significant at 1 percent level of significance. In other words, if households' income, family size and innovation in the mortgage market increases by one unit for each, the log-odds in favour of owning a house relative to not owning a house increases respectively by 2.123, 1.69 and 7.784 units. If a household income increases by a thousand francs, the probability for that household to own a house increase by 18.8 percent, all other factors held constant. For family size, if the number of dependent children in a household increase by one child, the probability for that household owning a house increases by 13.1 percent. Also, for the mortgage market innovation, a unit improvement in the housing loan finance sector such as increase awareness campaign on housing loan availability, increase ease of access, reduce collateral requirements, cut down on loan charges, or flexible loan application procedures, the probability for households to own houses will increase by 45.1 percent.

Furthermore, the coefficient for region of origin was negative meaning that individuals from the South West origin were less likely to be home owners as opposed to those from the other regions like the North West and West Regions of Cameroon- the base, by -0.518 units and the result is significant at 10 percent level of significance. In other word, there was a more likelihood for individuals or households from other regions of Cameroon residing in the Buea Municipality being house owners as opposed to households with South West origin. If the individual is from other regions other than from the South West, the log-odds in favour of owning a house as opposed to not owning increase by 0.595 units. In terms of probability, if a household head is from the South West Region, the probability to own a house will be less by 12.9 percent as opposed to household heads in Buea Municipality who originate from other regions of Cameroon.

With regard to mean interpretation, for age variable, the mean value of 3.1 corresponds to the age group 36 – 45 years. This implies that most respondents fall in this age range. For gender variable, the mean value of 0.6 implies most respondents were male. The mean value for marital status was 0.7 indicating that on average, most respondents were married persons. For education variable, the mean value of 3.3 corresponds to secondary and University levels. This indicates that most respondents' had attained secondary and university levels of education. Also for income level, the mean value of 1.8 implies that most household respondents had income less than 100,000 francs CFA, followed by income range between 100,000 – 300,000 francs CFA. The family size variable had a mean value of 2.5 indicating that most households had dependent children in the range 1 – 3 and 4 – 6 children. For the housing loan finance institution, the mean value of 0.27 indicates that most house owners in the Buea Municipality who obtain building loans did so from non mortgage finance institutions. Finally, the mean value for region of origin was 0.3. This indicates that most household respondents were non South Westerners.

4.3 Discussion:

This study seeks to examine the effect of socioeconomic status of households on home ownership in the Buea Municipality. Going by the logistic regression results in table 4.4, we found that the positive coefficients for age, gender, marital status, education, income, family size and mortgage market innovation variables were positive. With regard to the significance of the results shown by the $P > |z|$ values, the variables are significant at 1 percent, 5 percent and 10 percent levels of significance except for gender and education variables that were insignificant. Gender variable in the present study was not given due consideration since a distinction was not made between home ownership by sex. The study was interested in household as a unit and owning a house or not owning a house.

The results are in line with the permanent income hypothesis, life expectancy theory, as well as the findings of Hood (1999), Drew and Herbert (2012), and Antonio (2012). Also, the coefficient for region of origin variable was negative and statistically significant at 1 percent level of significance. It meant that Buea households with South West origin were less likely to be home owners as opposed to households coming from other regions. The possible justification for this could be attributed to the culture of the people with household from the North West and West Regions of Cameroon viewing home ownership as a priority. Furthermore, the level of education variable result was insignificant (weak). The possible justification here could be that the culture and the region of origin of the respondents might play a key role to make education level variable irrelevant or weak in determining home ownership. The result aligned with the findings of Antonio, (2012), who reported that no statistically significant relationship existed between education and home ownership in Mexico. Based on the high significance of most of the demographic and income variables as well as the mortgage market innovation variable in determining home ownership in the Buea Municipality, we fail to accept the first, second and third hypotheses. The significance of the results means that the results are reliable and good for policy recommendation.

Furthermore, the influence of diaspora remittances on households' home ownership was analysed using descriptive statistics and the findings showed that of the 176 house owners respondents who agreed to have family members abroad, 32 (18.2 percent) reported they received remittances from family members abroad which supported their house construction. This percentage is quite substantial in impacting house ownership in the Buea Municipality. It was also found from the descriptive statistics that most individuals/ households preferred taking building loans from non institutionalised financial institutions than from formal financial institutions. The key reason for this was the ease of taking loans with regards to its complexity and little collateral requirements, low loan charges, among others. The study suggest for further research the incorporation of the variable 'culture' to ascertain its effect on home ownership, establish a correlation for culture and education on home ownership, as well as using another technique to model the effect of diaspora remittances on household home ownership.

5. RECOMMENDATION AND CONCLUSION

Based on the regression result, it was found that the variable 'Mortgage Market Innovation' was the most impactful variable on house ownership given its high probability value for Marginal Effect After Logit. By implication, harnessing effort to straighten this variable would result in faster growth in home ownership rate in the Buea Municipality particularly with addressing some of the difficulties reported in the study. As a recommendation, there is need for more innovation in the mortgage market for greater visibility and ease of access by ways of; reducing housing loan requirements, creation of a one-stop-shop to expedite the process of obtaining building permit and land title documents which were reported to be costly and time consuming, reduce loan charges, and increase awareness campaigns on housing loan availability.

As a conclusion, this study has established some determinants of home ownership in the Buea Municipality. The study has taken a step further from the traditional mainstream variables to introduce and investigate the influence of other variables such as mortgage market innovation, region of origin and diaspora remittances on house ownership. The study has been able to using descriptive statistics to unveil some potential challenges limiting the full exploitation of housing loan institutions created by the government to promote home ownership in the Buea Municipality and Cameroon in general. The challenges were more noticeable with the lone state housing loan institution in the region (Credit Foncier du Cameroun). The study found that the institution has high cost of loan charges, heavy collateral requirements, lengthy processing procedures, inadequate sensitisation programs leading to lack of awareness and accessibility to housing loans, as well as lengthy duration and procedures for obtaining building permits and land titles.

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