



## DEMOGRAPHIC FACTORS AND HOME OWNERSHIP THROUGH MORTGAGE FINANCING IN NAIROBI COUNTY, KENYA

Julia R. Kigomo<sup>1</sup>, Thomas Anyanje Senaji<sup>2</sup>, Gillian W. Mwaniki<sup>3</sup>

<sup>1</sup> PhD Candidate,

<sup>2</sup> Professor at the East African University,

<sup>3</sup> Adjunct faculty and Director at the Kenya Institute of Curriculum Development

**Abstract:** Demographic factors relate to socio-economic characteristics of an individual or population. The Kenyan mortgage market has only 10% of its borrowers who are 40 years and above, 60% are those who are from 20 to 40 years. The 60% is made up of those people called millennial and are vibrant and have adequate disposable income, hence this gives them an advantage to invest while they are still young. The purpose of this study was to establish the relationship between demographic factors and home ownership through mortgage financing in Nairobi County, Kenya. The relationship between age, marital status, gender and household size with mortgage financing homeownership in Nairobi County, Kenya was examined. A descriptive census survey of employees in 43 mortgage lenders' banks and mortgage customers in state corporations were conducted. Both secondary and primary data was collected. Primary data was collected from 92 credit managers of mortgage institutions. The study also collected data from a sample of 393 mortgage customers selected from a population of 24,000 employees of three parastatals which was done through administering of questionnaires and conducting of interviews in their respective work stations. Secondary data was collected from published financial statements of CBK, mortgage lenders, and Kenya National Bureau Statistics (KNBS) for the period of 30 years (1989 –2019). Data collected was both quantitative and qualitative and was analyzed using both descriptive and inferential statistics. It was found that demographic factors had statistical significant relationship with mortgage home ownership. It is recommended that mortgage market should be expanded with appropriate housing policies that take into account the demographic factors of the population.

**Key Words:** Age, marital status, gender, household size, mortgage financing

### Introduction

Demographic factors are those characteristics in a consumer that act a driving force for them to purchase goods or services. Some of these traits include age of the consumer, gender, marital status, race, parity, type of job, literacy levels, and household income. This factors also act as determinants in terms of home ownership or mortgage uptake.

Like all markets, the mortgage market is the totality of interactions between suppliers (investors) and consumers (borrowers) with intermediaries (mortgage lenders and brokers) in between, in a framework set by law and regulation (Gramlich, 2007). Changes affecting any of these categories affect the characteristics and effectiveness of the market. Owner-occupied housing is the major asset in many households' portfolios and across a wide span of the life cycle.

The willingness and capacity of the population to undertake mortgage in Nairobi County can be determined by the demographic characteristics of the population. In some studies it has been suggested that that mortgage firms should pay attention to demographic characteristics of the population while marketing their products (Alam, 2012). This study is will focus on Nairobi County which has high diversified population in terms of demographic factors and also high number of mortgage customers.

## Statement of the Problem

Despite the government initiatives to increase home ownership in Kenya, the mortgage to GDP ratio is a paltry 2.5%. This compares poorly to other countries such India (6%), Colombia (7%), European Union (50%) and US (70%) (World Bank, 2018). This leaves a huge housing demand versus supply gap where the demand is higher and driven by population growth and urbanization; highlighting the significance of functional mortgage regimes in satisfying the housing needs of the population and in reinforcing the development of the building, banking and other related sectors of an economy. 9 out of 10 Kenyans cannot afford to purchase the houses they reside in even with a mortgage facility in town, if at all they qualify (Aguko, 2012).

Reports by the Central Bank of Kenya (2017) and World Bank (2017) show that less than one in every 10 Kenyans can afford a mortgage with the commercial bank mortgage facility records indicating only 20,000 accounts in year 2015, with the total value of mortgage loans at the end of December 2016 being KShs 133.6 billion (CBK, 2015). According to Cytonn (2019), the local housing deficit of about 5:1 in demand and supply respectively constitutes a significant challenge within the Kenyan housing market. The study deemed fit to address relationship between factors that influence mortgage financing in Nairobi County, Kenya and the findings generalized to the entire country. The study therefore focused on the relationship between demographic factors and home ownership through mortgage financing in Nairobi County, Kenya.

## Research Hypothesis

*H<sub>01</sub>: There is no relationship between demographic factors and home ownership through mortgage financing in Nairobi County, Kenya.*

## Materials and Methods

The study adopted a descriptive survey design. This involved surveying various suppliers of mortgage institutions to find out the factors which determine home ownership through mortgage financing in Kenya. In descriptive design, the problem is structured and well understood (Ghauri & Gronhaug, 2002). Descriptive research portrays an accurate profile of persons, events or situations (Robson, 2002). This method is preferred because it gives a report of things as they are (Mugenda & Mugenda, 2003). In this study, the population comprised of employees in the mortgage banks and mortgage customers in state corporations in Kenya. In all the 43 mortgage providers, a total of 92 credit managers were selected. The study also sampled 393 mortgage customers. Data from closed questions was analyzed through frequencies and percentages. Data from Likert type questions was also analyzed through frequency distributions and percentages. Data from open questions was analyzed through thematic summary analyses to indicate clearly the themes and patterns highlighted in the answers. Presentation of the analyzed data was done with the aid of tables and charts. Linear regression was used to establish the predictive power of the study models.

## Results, Analysis, Discussions and Conclusions

The study sample was 92 credit managers of mortgage institutions and 393 mortgage customers from various parastatals in Kenya. Questionnaires were administered and successfully collected from 69 credit managers which represented a response rate of 75%. For customers of mortgage finance institutions, 280 questionnaires were successfully collected from the ones administered. This was a response rate of 71%. Saunders, Lewis and Thornhill (2015) asserted that response rates of 60% or more should be the goal of researchers in academic studies and applied research studies that are publishable in peer reviewed journals. The response rate for both the credit managers and customers was therefore considered acceptable.

The over 70% (credit managers: 75%; customers: 71%) response rate was made possible by making follow up calls to remind the respondents to fill-in and return the questionnaires. Mugenda (2003) suggests that any response of 50% and above is adequate for analysis, thus 78% is even better. Consequently, the response rate was satisfactory and the collected data used for both descriptive and inferential analyses.

### Demographic Factors

The results in Table 1 provide the descriptive statistics regarding the link between demographic factors and home ownership. The statistics include maxima, minima, number of responses (N), mean and the standard deviation.

**Table 1: Demographic Factors and home ownership**

| Statement                                                                         | N  | Min. | Max | Mean | Std. Dev |
|-----------------------------------------------------------------------------------|----|------|-----|------|----------|
| Older and middle-aged people take mortgages and buy houses more than young people | 69 | 2    | 5   | 3.99 | 1.007    |
| Home ownership is higher in married people than single people                     | 69 | 3    | 5   | 4.06 | 0.705    |
| Number of male owners surpasses those of female homeowners                        | 69 | 2    | 5   | 4.01 | 0.883    |
| Valid N (listwise)                                                                | 69 |      |     |      |          |

The results in Table 1 show that the surveyed credit managers agreed that older and middle-aged people take mortgages and buy houses more than young people ( $M = 3.99$ ,  $SD = 1.007$ ). These results are interpreted to mean that, from the experience of the credit managers, mortgages are taken more by the older members in the population rather than the young ones. Swan (2015) explained this phenomenon by indicating that mortgages are usually taken by the middle aged and the elderly in the community since they are mostly the ones in good paying jobs which enhance their affordability. The young people on the other hand are in low paying and unstable jobs which are seen as a high risk by mortgage institutions.

Regarding home ownership between married and single people, the credit managers agreed that home ownership is higher in married people than single people ( $M = 4.06$ ,  $SD = 0.705$ ). This implies that married people have a higher probability for applying and qualifying for a mortgage than their single counterparts. These results concur with the findings by Segal and Sullivan (2018) that married couples have higher probability and flexibility to apply for a mortgage. This is because they relatively have a have a higher combined disposable income that their comparable singles and they mostly required a home to prepare for their family.

The results from the study presented in Table 1 show that the credit managers agreed that the number of male owners surpasses those of female homeowners ( $M = 4.06$ ,  $SD = 0.705$ ). This suggests that in Nairobi County, the number of male customers seeking mortgages significantly surpasses that of female customers. This contradicts the findings from a study by Bourassa (2014) who noted that in Australia, number of males and females who have mortgages was not significantly different. However, Segal and Sullivan (2018) found that in patriarchal and gender unequal societies, the number of female homeowners is expected to be significantly less than the number of male homeowners. This is due to inequality in the job market and distribution of resources such as land.

### Regression Analysis

The researcher applied SPSS version 22 to code, enter and compute the measurements of the regressions for the study. According to Green & Salkind (2003) regression analysis is a statistics

process of estimating the relationship between variables. Regression analysis helps in generating equation that describes the statistics relationship between one or more predictor variables and the response variable.

### **Results of Linear regression between demographic factors and homeownership through mortgage financing in Nairobi County, Kenya**

**Table 2: Regression Coefficients**

| Model |                     | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  |
|-------|---------------------|-----------------------------|------------|---------------------------|-------|-------|
|       |                     | B                           | Std. Error | Beta                      |       |       |
| 1     | (Constant)          | 3.254                       | 2.623      |                           | 2.439 | 0.002 |
|       | Demographic factors | 0.309                       | 0.101      | 0.325                     | 3.053 | 0.003 |

a. Dependent Variable: Homeownership

The results from the credit managers on the influence of demographic factors on home ownership in Nairobi County showed that demographic factors had a significant positive relationship with home ownership ( $r = 0.552$ ,  $p < 0.001$ ). These results concurred with the results from the customer survey. From the regression results, demographic factors had a significant influence on home ownership through mortgage ( $t = 3.053$ ,  $p = 0.003$ ). Further, results from the analysis of data from customers showed that 52.5 percent of the respondents considered owning a home as essential while 38.9 percent considered it as high priority. Those who considered owning a home as medium priority were 8.6 percent. Age had a high association with the priority with which the customer respondents regarded owning a house, particularly those in the 31-40 bracket. These results implied that demographic factors are key in determining whether a customer would take a mortgage to own a home or not.

The findings that demographic factors have a significant positive effect on homeownership support the diffusion of innovations theory (Rogers, 2003). The theory posits that innovation adopters have traits that determine their probability of adopting an innovation such as mortgages. Though there has not been agreement on the traits or factors that determine innovation adoption, some studies have indicated that age, marital status and gender are factors that determine adoption of some innovations (Leppel, 2017). Mortgage financing and home ownership are a form of diffusion innovation which the study established to be influenced by demographic factors. These factors such as age, marital status and gender are expected to influence mortgage adoption due to the nature of mortgages which require a large outlay of money, long term commitment and being usually attractive to those with families. Being a patriarchal society, it is expected that most home owners and mortgage customers are male. This relates to other studies such as Kusuma (2017) and Lutfi (2015) which also support the diffusion of innovations theory. The implications of these findings to the innovation theory is that there are demographic elements such as age, gender, employment and marital status which significantly influence mortgage financing and homeownership as stipulated by the diffusion of innovations theory.

Arising from the finding on the relationship between demographic factor and home ownership, the second null hypothesis, that

*H<sub>01</sub>: There is no relationship between demographic factors and home ownership through mortgage financing in Nairobi County, Kenya.*

was rejected and a conclusion reached that demographic factors significantly influence home ownership through mortgage financing in Nairobi County, Kenya.

## Conclusion

The study concludes Demographic factors had a significant positive effect on home ownership. These factors, which included marriage, age, were significantly influenced the decision of customers to take a mortgage or possess a home. Specifically, older and middle-aged people were noted to take mortgages and buy houses more than younger people. Regarding home ownership between married and single people, home ownership is higher in married people than single people indicating that married people have a higher probability for applying and qualifying for a mortgage than their single counterparts. This implies that mortgage firms should target married people in their promotion of products.

## Recommendations

The study recommends that mortgage financing institutions should come up with mortgage products bearing in mind the demographic factors of Nairobi County. This is because results indicate that the current cost of mortgage financing is prohibitive for the vast majority of the population. Mortgages are completely out of reach for majority of population based on the demographic factors. Hence the mortgage market should be expanded with appropriate housing policies that take into account the demographic factors of the population.

## References

- Central Bank of Kenya & World Bank. (2017). *Developing mortgage finance in Kenya: Survey Analysis*. Nairobi: Central Bank of Kenya.
- Cytonn. (2019). *Renting vs Owning a Home*. Nairobi: Cytonn.
- Gramlich, E. (2007). *Subprime mortgages: America's latest boom and bust*. Washington: Urban Institute Press.
- Kusuma, T. H. (2017). Analysis of Factors Affecting House Ownership in Indonesia. *American Research Journal of Business and Management*, 4(1), 1 – 13.
- Leppel, K. (2017). Married and Unmarried, opposite-and Same-Sex Couples: A Decomposition of Home ownership Differences. *Journal of Housing Research*, 16(1), 61-81.
- Lutfi, P. (2010). Relationship between demographic factors and Investment Decision in Surabaya. *Journal of Economics, Business and Accountancy Venture*, 13(3), 213-224.
- Mugenda, O. & Mugenda A. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- World Bank. (2018). *Bridging the housing gap: Mortgage finance in Kenya*. Nairobi: World Bank.