

# Relationship between housing finance institutional contexts and financial contexts to housing ownership by low-income earners in Bauchi LGA, Nigeria

Low-income earners in Bauchi LGA, Nigeria

653

Received 10 March 2021  
Revised 29 April 2021  
Accepted 5 May 2021

Moses Jonathan Gambo

*Department of Estate Management, Faculty of Environmental Technology,  
Abubakar Tafawa Balewa University, Bauchi, Nigeria*

Sani Usman Kunya

*Department of Building Technology, Faculty of Environmental Technology,  
Abubakar Tafawa Balewa University, Bauchi, Nigeria*

Bala Ishiyaku

*Department of Estate Management, Faculty of Environmental Technology,  
Abubakar Tafawa Balewa University, Bauchi, Nigeria*

Musa Jacob Ashen

*Department of Estate Management, Faculty of Environmental Sciences,  
University of Jos, Jos, Nigeria, and*

Wilfred Emmanuel Dzasu

*Department of Building, Modibbo Adama University of Technology, Yola, Nigeria*

## Abstract

**Purpose** – The purpose of this paper is to investigate the relationship between housing finance institutional related variables and financial related variables of low-income earners in Bauchi Local Government Area, Bauchi, Nigeria.

**Design/methodology/approach** – In this study, quantitative research approach was adopted. Self-administered structured questionnaires were used to collect information from 500 primary school teachers in Bauchi Local Government Area, Bauchi, Nigeria. A correlation analysis was carried out to find the relationship between housing finance institutional contexts and finance contexts to low-income earners in the study area using SPSS Version 23 software.

**Findings** – The findings shows that the low-income earners were more concerned with the accessibility and affordability on housing ownership, and it also showed that performance and effectiveness of the housing finance institutions were of paramount importance to housing ownership for the low-income earners in the study area.

**Practical implications** – The finance institutions are the prime consumer of these research findings. The participants in the finance institutions are going to benefit from the low-income earners' housing ownership development.

**Originality/value** – The paper also emphasized that the finance institutions should make the housing finance loan accessible and affordable to the low-income earners to meet their dream to sustainable housing ownership.

**Keywords** Relationship, Accessibility, Institutional context, Affordability, Financial context, Housing finance

**Paper type** Research paper



## 1. Introduction

Housing finance was before an immature section of domestic financial markets. It presently involves an extremely critical place, not just in the monetary arrangement of individual economies, however, as a component of the worldwide budgetary framework also. For instance, US contracts are currently financed through securitization on a noteworthy scale by Chinese and Indian savers, among others (Louçã and Ash, 2018). Ehlenz (2018) suggested that formal housing finance institutions are rarely willing to assist with the purchase of land, especially where the tenure is insecure to provide assistance with improvements to the rental housing stock or to support non-conventional household arrangements such as sharing of multiple family compounds. Buckley *et al.* (1996) in Thomas (2014) pointed out that the declining effectiveness of housing finance institutions, coupled with economic and fiscal crises, has made governments more aware of the need to promote savings, reduce subsidies and mobilize domestic resources and motivate the involvement of private financial institutions.

The history of housing cannot be separated from the social, political and the economic development of man. Housing is vital to human existence as its ranks among the top three needs of man. Its provision has always been of great importance to man's needs. In the last 10 decades, Nigeria has been experiencing very rapid urbanization. This is largely as a result of rapid urban growth in relation with population growth and rural-urban migration driven by rapid socioeconomic changes and development. However, this growth has not been matched with simultaneous provision of adequate housing development. Thus, the significant rise in population, number and size of Nigerian cities have led to the acute shortage of dwelling units, resulting in overcrowding, high rents, poor urban living conditions, low infrastructural provisions, deteriorating environment, poverty and increased insecurity in urban centers (Ibrahim and Mbamali, 2013).

According to Afrane *et al.* (2016), one of the fundamental reasons why finance for housing has gotten low consideration is the extensive capital that is required either to purchase or lease a house. However, the Nigerian National Housing Policy FGN 2004 characterizes the low-income earners as all employees and self-employed persons whose yearly income is N100, 000 (\$277.10) and below (i.e. the equivalent of salary grade level of 01–06 within the civil service) (Ogunnaike, 2017). About 57% of the Nigerian population falls below the poverty line, which is on the average of US\$1 per day (Wahab, 2006). According to Adedeji and Olotuah (2012), most employees who work in the public sector and private sectors, as well as many self-employed Nigerians, earn well below the national minimum wage, especially the primary school teachers. This, by implication, indicates that about 70% of Nigerians fall into this low-income group, which also forms the nucleus of the nation's economy. There is lack of research on effective housing ownership for primary school teachers in the study area. Hence, this study investigates the relationship between housing finance institutional context variables and finance context variables to low-income earners in Bauchi Local Government, Nigeria.

## 2. Literature review

Housing ownership can be characterized as the act of guaranteeing that individuals in a network have a home to live in; it could be a house or some other sort of abiding, cabin or haven (Green, 2017). Patton (2015) characterizes a house as a home when it shields the body and solaces the spirit. However, Gavu and Owusu-Ansah (2019) see a house as a structurally separate and independent place of abode such that a person or group of persons can isolate themselves from the hazards of climate such as storms and the sun. The definition, therefore, covered any type of shelter used as living quarters, such as separate houses,

semi-detached houses, flats/apartments, compound houses, huts, tents, kiosks and containers (Peprah and Obeng, 2015).

Housing finance is a wide subject, the idea of which can differ crosswise over main lands, districts and nations; especially as far as the regions it covers (Bhuka, 2019). For instance, what is comprehended by the expression “housing finance” in a developed nation might be altogether different to what is comprehended by the term in a developing nation (Dymski, 2018). The International Union for Housing Finance, as a multinational systems administration association, has no official position on what the best meaning of housing finance is (Rolnik, 2013). Notwithstanding, the choice of statements beneath is offered as a preview of what housing account as a theme covers:

Housing finance unites complex and multi-area issues that are driven by always showing signs of change nearby highlights, for example, a nation’s legitimate condition or culture, monetary cosmetics, administrative condition, or political framework (Adshead, 2017).

In the jurisdiction of finance and economics, it is an agreement under which an individual borrows money from a lender (usually a mortgage-lending institution) to purchase a property and pledges same property such that the lender takes possession of the said property if the borrower fails to repay the money back (Razak and Saupi, 2017). Mortgage is:

[. . .] a legal arrangement by which someone borrows money from a bank or similar organization in order to buy a house and pay back the money over a stipulated period of time (Peters and Panayi, 2016).

The word mortgage according to the Property and Conveyance Law (1959) is “including any charge or lien on any property for securing money or money’s worth,” whereas the Nigerian Land Use Act (1978) posited it as encompassing a second and subsequent mortgage and equitable mortgage.

### *2.1 Performance of financing institutions*

A review of the performance of primary mortgage institutions (PMIs) shows that they have done poorly from inception, with only 34.2% of the 280 licensed banks at inception in 1989 when the Mortgage Institutions Act was enacted, surviving till 1997 when their supervision was transferred to the Central Bank of Nigeria. Out of the 195 handed over to the Central Bank of Nigeria, only 96 were left at the end of 2003 after another round of license revocation, which saw 99 losing their licenses as a result of poor performance and insolvency (Kama *et al.*, 2013). The institutions were constrained by inadequate capital base, poor corporate governance and lack of well-defined business philosophy (Obi and Uwandu, 2015). The availability and accessibility of finance is an essential factor required to mobilize other non-financial resources toward the actualization of the goals of housing investment (Adesegun, 2016). Warnock and Warnock (2008) attributed that comparing a number of countries grouped alongside development strata shows that stronger legal rights for both borrowers and lenders, macroeconomic conditions and deeper credit information system are strong factors that can help in deepening the mortgage market in any country. The more the information available and the easier it is to enforce collateral rights (ability to possess), the bigger the market tends to be in all countries, notwithstanding the size of the country. The Nigerian market is especially difficult given the macroeconomic volatility that makes policies to become unstable and therefore unreliable in the long term.

Sendi *et al.* (2019) also conducted a study on the role of mortgage in housing finance in Slovenia. The study whose main aim was to explore the role mortgage lending play in housing finance in Slovenia revealed that the National Housing Fund (NHF), which is a

public agency, dominate majority of the Slovenian housing finance market, because of weak primary and non-existing secondary mortgage market. The study therefore recommended the development of mortgage primary markets and mortgage secondary markets as important tools for the future in improving housing finance and also developing fixed income capital market in Slovenia. [Chambers et al. \(2008\)](#) conducted a study on mortgage innovation, mortgage choice, and housing decisions. The main study sought to examine some of the more recent mortgage products on housing. It was realized that the introduction of mortgage products had positive correlation with homeownership using housing data from 1995 to 2005. It was also observed that homeownership rate declines as these instruments were removed from the mortgage market. Also [Fernandez and Aalbers \(2016\)](#) conducted a study on the role of private mortgage insurance in the US Housing Finance System. The main objective of the state was to assess the role of private mortgage insurers in the current US housing finance system. The study revealed that the high loan-to-value mortgage lending is relatively risky, and by assuming these risks, mortgage insurance enables more lenders and investors to supply capital for these mortgages. [Adedeji and Olotuah \(2012\)](#) conducted a study on the accessibility of low-income earners to housing finance in Nigeria; the study revealed that credit societies have provided housing finance to a substantial number of people enabling them to own their personal houses. The study shown that funds obtained from credit societies for housing are often insufficient because of high cost of building materials and labor for construction. The study also found that in spite of the intermediation efforts of private developers and cooperative societies in providing finance for housing, accessibility level to housing finance by the low-income earners is still very low. [Udoka and Kpataene \(2017\)](#) commented that the poor performance of the Nigerian housing finance system could be attributed to low accessibility, underdevelopment of the land tenure system and the inability of financial systems to provide low-cost finance.

### *2.2 Issues related to performance of financing institutions*

There are many constraints limiting the availability of housing finance in Nigeria. Some of these constraints were identified by [Ricks \(2018\)](#) as unstable macroeconomic conditions, a weak legal framework for property rights and lack of mortgage market infrastructure and unavailability of funds for long-term finance to promote financial intermediation. From other sources, including [Nwuba and Chukwuma-Nwuba \(2018\)](#), poor access to finance has been widely identified as the major impediment to having affordable housing in Nigeria. Similarly, [Renaud \(2008\)](#) identified access to finance as one of the major constraints of housing finance in most emerging economies. In Nigeria, [Hernandez \(2009\)](#) uncovered that using survey analysis and secondary data highlighted that the NHF policy, land use act, structure of PMIs and high interest rates were some constraints to mortgage financing in Nigeria. [Udoka and Kpataene \(2017\)](#) examined the problems of financing real estate development in Nigeria through the administration of questionnaires and a simple descriptive analysis. The study revealed that high interest rates and several other requirements for loan application bedeviled the financing of real properties in Nigeria. The study therefore recommended, among others, that the Nigerian Government should endeavor to solve economic problems, such as inflation, to minimize the problems that plague the financing of real estate development.

[Mukhtar et al. \(2016\)](#) evaluated the performance of the NHF Scheme in terms of housing delivery in Nigeria. The study adopted secondary data and used the use of percentiles and *t* test as well as Pearson product moment of correlation for the purpose of analysis. The result indicated that the PMIs were not adequate in number and that there was a wide difference between the amounts the mortgagors actually applied for and the amounts approved.

Akinjare *et al.* (2016) studied assessment of the contribution of PMIs to housing finance in Nigeria. Their study identified two factors that contributed to the vague performance record of Federal Mortgage Bank of Nigeria as lack of information to most savings' contributors who are willing prospective borrowers and rigid conditions stipulated by Federal Mortgage Bank of Nigeria for obtaining NHF loan. Akinjare *et al.* (2016) further identified that prolonged problems that has constrained adequate and efficient credit delivery to the housing sector as, low interest rate on NHF, low level of participation in the NHF scheme, macroeconomics environment, non-vibrancy of some PMIs, cumbersome legal regulatory framework for land acquisition, the structure of bank deposit liabilities, low capitalization, inadequate mobilization of funds through savings deposits, distractions and failure to confine activities to savings mobilization and mortgage lending and loan defaults (Akinjare *et al.*, 2016).

### 2.3 Institutional context

Institutional analysts assert that the institutional environment can strongly influence the development of formal structures in an organization, often more profoundly than market pressures. Innovative structures that improve technical efficiency in early-adopting organizations are legitimized in the environment. Ultimately, these innovations reach a level of legitimization where failure to adopt them is seen as "irrational and negligent" (or they become legal mandates). At this point, new and existing organizations will adopt the structural form even if the form does not improve efficiency. Mader and Sabrow (2019) argued that often these "institutional myths" are merely accepted ceremoniously in order for the organization to gain or maintain legitimacy in the institutional environment. Organizations adopt the vocabularies of structure prevalent in their environment such as specific job titles, procedures and organizational roles. The adoption and prominent display of these institutionally acceptable "trappings of legitimacy" help preserve an aura of organizational action based on good faith. Legitimacy in the institutional environment helps ensure organizational survival. However, these formal structures of legitimacy can reduce efficiency and hinder the organization's competitive position in their technical environment. To reduce this negative effect, organizations often will decouple their technical core from these legitimizing structures. Organizations will minimize or ceremonialize evaluation and neglect program implementation to maintain external (and internal) confidence in formal structures while reducing their efficiency impact.

Meyer *et al.* (2018) reported that the net effect of institutional pressures is to increase the homogeneity of organizational structures in an institutional environment. Firms will adopt similar structures as a result of three types of pressures. Coercive pressures come from legal mandates or influence from organizations they are dependent upon. Mimetic pressures to copy successful forms arise during high uncertainty. Finally, normative pressures to homogeneity come from the similar attitudes and approaches of professional groups and associations brought into the firm through hiring practices. They add that rate of institutional isomorphism is increased when firms are highly dependent on the institutional environment; exist under high uncertainty or ambiguous goals; and rely extensively on professionals. Stevens and Gebre-Medhin (2016) examined the growth of three administrative services in California public schools (school health, psychology and curriculum) from the standpoint of institutional concept. He found that when there is a high level of consensus and cooperation within the institutional environment, diffusion of innovative structures is steady and long lasting. However, when the institutional environment is contentious and unfocused, adoption of innovative structures is slow and tentative. Kung *et al.* (2015) evaluated the rate of adoption of civil service organizations in

the United States from 1880 to 1935. Their results strongly support the institutional concept outlined above. They found that when coercive pressures are high (under state mandate), organizations quickly adopt new structures. Under low coercive pressures, the rate of adoption is much slower. However, increased adoption builds legitimacy in the institutional environment, accelerating the rate of adoption of the new structural form. Furthermore, they also confirmed the hypothesis that although early organizations adopt the new form to improve efficiency, later organizations adopt the structural form to maintain legitimacy. Quantitative models predicted civil service adoption based on city characteristics (in early time periods) but failed to predict adoption in later time periods.

*2.3.1 Financial institutions performance.* Shepherd and Günter (2010) identified profitability as an important measure of firm's performance but it should not be considered as single measure and should also be supported by other measures like efficiency. Performance is defined in terms of efficiency and defined efficiency as the ratio of outputs to inputs, where larger value of this ratio indicates better performance (Chen *et al.*, 2015). The performance of the banks can be correctly identified in terms of bank efficiency (Fernando and Nimal, 2014). Measurement of efficiency in banking institution also helps to benchmark the relative efficiency of individual bank against the best practice bank. Kumar and Gulati (2009) reported that performance is the right combination of efficiency and effectiveness in both profit and non-profit organization, whereas Abadi *et al.* (2013) confirmed that performance is proportion of output to input and performance assessment is how resources have been managed and used by an organization, also that performance measurement and effectiveness are identical concept. The study of Roghanian, Rasli and Gheysari (2012) relates bank performance by productivity, where productivity was decomposed into efficiency and effectiveness.

Improving the performance of an organizational unit relies on both efficiency and effectiveness. Hawaldar *et al.* (2017) stated that performance evaluation of banks is associated with how effectively banks use its assets, shareholders equities and liabilities, revenues and expenses. The above discussion helps us to derive the concept of performance and its importance in banking. The term performance can be elucidated in multiple ways. Some previous studies refer to banking performance in terms of profitability and measured it by return on assets (ROA); some studies explore the financial performance by considering the aspects of profitability and efficiency, where profitability is measured by ROA only and efficiency by profit per employee. Some other studies describe performance on the basis of CAMELS framework, on the contrary modern studies argued that performance is not merely the profitability and efficiency, but it should also be measured in terms of efficiency and effectiveness. Some studies also use the term efficiency and performance interchangeably. In many recent studies, performance measurement approach of banking shifts from traditional approach to modern approach, which evaluates the bank performance comprehensively considering the aspects of efficiency and effectiveness. Efficiency shows us about the quantity of output produced by banks within the available resources and effectiveness signifies us about the quality of output generated by banks. Thus, efficiency and effectiveness are key drivers of banking performance.

*2.3.2 Financial institutions effectiveness.* Ehlenz (2018) suggested that formal housing finance institutions are rarely willing to assist with the purchase of land, especially where the tenure is insecure to provide assistance with improvements to the rental housing stock or to support non-conventional household arrangements such as sharing of multiple family compounds. Ricks (2018) pointed out that the declining effectiveness of housing finance institutions, coupled with economic and fiscal crises, has made governments more aware of the need to promote savings, reduce subsidies and mobilize domestic resources and motivate



the involvement of private financial institutions. Effectiveness is the degree to which an organization achieves its goals. Gruman and Saks (2011) was of the opinion that the measures of effectiveness assess the performance of an organization or business unit with respect to stated goal and also serve as a significant element in the planning and control procedure. Bhagavath *et al.* (2009) attributed that effectiveness is the extent to which outputs of service providers meet the set objectives and efficiency is the success with which an organization uses its resources to produce outputs.

## 2.4 Financial context

It is never again unusual to realize that some Nigerians, especially the low-income groups living in the urban areas are homeless. The reason is that the cost of building or renting an accommodation is simply beyond the reach of an average Nigerians. Thus, the Nigerian housing sector challenge is that of affordability and accessibility. Several housing construction and delivery system is targeted mainly at the middle- and high-income group of the population that can either pay cash or access housing finance from the banks. Housing financing is done through mortgages. But the provisions of these mortgages to the income earners are through the National Housing Trust Fund. However, only very few proportion of the income earners has been able to access these mortgages. This is because the performance of the housing finance system in loan disbursement has been dismal and discouraging (Atamewan *et al.*, 2017).

*2.4.1 Finance accessibility.* The relevance of this view to housing ownership accessibility is in ensuring that housing provision is not focused on some “chosen” segments of the society but all members of the community have equal opportunity to choose their own accommodation according to their means or affordability level (Okewole and Aribigbola, 2006). Social equity concerns the social view of housing and relates to a situation in which all citizens have access to housing without limitations as to one’s socioeconomic background or status in society. Most of the contemporary problems affecting access to housing have been reinforced by societal negative attitude toward the vulnerable groups among the low-income group (Opoko and Oluwatayo, 2014).

*2.4.2 Finance affordability.* Mulliner *et al.* (2016) reported that housing affordability in recent years has become a common way of summarizing the nature of the housing difficulty in many nations. This is in contrast to the “slum problem,” the “low-income housing problem,” the “housing shortage” or the “housing need” definitions of previous decades. A household is said to have a housing affordability problem, in most formulations of the term, when it pays more than a certain percentage of its income to obtain adequate and appropriate housing. Gan and Hill (2009) posited that the capability of a household to purchase a house can be viewed in at least three different ways. We draw a distinction between the concepts of purchase affordability, repayment affordability and income affordability. Purchase affordability considers whether a household is able to borrow enough funds to purchase a house. Repayment affordability considers the burden imposed on a household of repaying the mortgage. Income affordability simply measures the ratio of house prices to income. Housing affordability is not simply a matter of housing costs and income levels, but it is about people’s ability to obtain housing and to stay in it. Despite the fact that there is excess demand of housing either as owner or for rent by household in Nigeria, their purchasing power is limited by their respective income. Although most people’s incomes, especially primary school teachers in Nigeria can hardly purchase public and private developers housing supply, nevertheless, public developers do give out these houses in form of mortgage. Ademiluyi and Raji (2008) observed that private developers tend to contribute to a large proportion, the entire housing stock in the country. Damulak

(2015) also observed that policymakers are not really aware of the magnitude of housing problems for low-income earners when looking at increase in house rent and rising cost of building materials. But Olateju (1990) noted that the increasing high rent can be attributed to the decrease in housing stock. Housing is a critical component in the social and economic fabric of all nations.

### 2.5 Housing ownership

People have possessed many things such as property, land, objects and relationships from the dawn of time, and such ownership is a cornerstone structuring many modern societies today. People experience special feelings toward their ownership targets and develop strong attitudes toward the relationships they build with the owned items. These possessive feelings toward objects appear to be highly psychological in nature (Ryan-Collins *et al.*, 2017). The psychological (i.e. emotional and cognitive) bond with an ownership object represents what is called psychological ownership (PO), the PO theory explains the feelings of connection or the psychological state of ownership in the business context. First, the meaning and emotion associated with my, mine, and our express a feeling of ownership. Second, PO represents a relationship between an individual and an object (both material and immaterial). Third, an individual perceives the object (i.e. a firm) to have a close connection with the self. Finally, the state of PO is complex and consists of both affective and cognitive components: Psychological ownership is a state in which individuals feel as though the target of ownership or a piece of that target is theirs (it is mine). It is a condition of which one is aware through intellectual perception. It reflects an individual's awareness, thoughts and beliefs regarding the target of ownership. The cognitive state, however, is coupled with an emotional or affective sensation (Chen *et al.*, 2020).

Research has shown that ownership can be felt even toward nonphysical entities, works of art, ideas, thoughts, words, relationships and people. These complex feelings of ownership are pleasure producing and object specific. In the company–customer relationship, they stem largely from perceived control, customer participation, company–customer identification and sense of belonging (Nancekivell *et al.*, 2019).

### 3. Research methodology

The study involved the use of questionnaires to collect information from a sample of (500) primary school teachers of Bauchi Local Government Education Authority, which have about 5,474 teachers in 2019. The sampling technique used is the simple random sampling method to arrive at the desired result. A five-point Likert scale was used for the variable items to ease the means of assessing the responses (Kothari, 2004). Going by the performance descriptors in Braunsberger and Gates (2009) and Seshadhri and Topkar (2014), the descriptors used for accessibility were very likely rated 5, likely rated 4, uncertain rated 3, unlikely rated 2 and very unlikely rated 1. Those used for affordability were very high rated 5, high rated 4, uncertain rated 3, low rated 2 and very low rated 1. For performance, descriptors used were most available rated 5, available rated 4, uncertain rated 3, not available rated 2 and mostly not available rated 1. Those used for effectiveness were very high rated 5, high rated 4, uncertain rated 3, low rated 2 and very low rated 1. Bauchi Local Government was chosen because it has the highest number of primary school teachers (Levels 1–6) in the study area, which is about 29.1% of the total population of primary school teachers in the state, which is 18,755 (EMIS SUBEB, 2017). Primary school teachers were chosen because they are less fortunate in terms of salaries and according to FixusJobs.com (2017), they are at the very bottom of the salary scale for teachers and the low-income group in Nigeria. The average salary for Nigerian teachers in primary schools is



N15,000/month (\$41.72). Reliability test was carried out to measure reliability of constructs as suggested by Pallant (2011) and the results indicated that a reliable Cronbach's alpha of more than 0.7 was achieved in all of the constructs in Table 1. A correlation analysis was carried out to find the relationship between housing finance institutional contexts and finance contexts to low-income earners in the study area. Statistical Package for Social Science (SPSS, version 23) was used for statistical analysis of the data generated from the questionnaire survey. The levels of significance for all inferential statistical tests were established at 0.05. The magnitudes of relationships reported were interpreted using Burris (2005) descriptors, With coefficients >0.69 as very strong, 0.50–0.69 as substantial, 0.30–0.49 as moderate, 0.10–0.29 as weak and 0.01–0.09 as negligible.

However, reliability test was carried out to measure reliability of constructs as suggested by Pallant (2011). Results indicated that a reliable Cronbach's alpha of more than 0.7 was achieved in all of the constructs in Table 1.

A total number of 500 questionnaires were administered as recommended by Krejcie and Morgan (2018) against a sample size of 5,000 respondents. A total of 389 (77.8%) questionnaires were retrieved and 22 questionnaires were discarded because of incomplete response, missing data, univariate and multivariate outliers.

### 3.1 Demography

The demographic features of respondents include the gender, age and level of education, years in service, length of service and monthly income of the respondents. Analysis of frequency and percentage was carried out and the results showed that the majority of the respondents were male (62.7%), whereas their female counterparts comprised only 37.3% of

| Variables          | Options                           | Frequency | (%)   |
|--------------------|-----------------------------------|-----------|-------|
| Gender             | Male                              | 230       | 62.7  |
|                    | Female                            | 137       | 37.3  |
| Age                | Under 26 years                    | 82        | 22.3  |
|                    | Between 26 and 35 years           | 105       | 28.6  |
|                    | Between 36 and 45 years           | 72        | 19.6  |
|                    | Between 46 and 55 years           | 44        | 12.0  |
|                    | Between 56 and 65 years           | 52        | 14.2  |
|                    | 66 years and above                | 12        | 3.3   |
| Level of education | Primary school living certificate | 11        | 3.0   |
|                    | Secondary school/cert.            | 28        | 7.6   |
|                    | National diploma/NCE              | 191       | 52.0  |
|                    | Bachelor's degree/HND             | 106       | 28.9  |
|                    | Master's degree and above         | 31        | 8.4   |
| Length of service  | Under 6 years                     | 106       | 28.9  |
|                    | Between 6 and 10 years            | 86        | 23.4  |
|                    | Between 11 and 15 years           | 51        | 13.9  |
|                    | Between 16 and 20 years           | 39        | 10.6  |
|                    | Between 21 and 25 years           | 44        | 12.0  |
|                    | 26 years and above                | 41        | 11.2  |
| Monthly income     | Under N11,000                     | 11        | 3.0   |
|                    | Between N11,000 and N20,000       | 23        | 6.3   |
|                    | Between N21,000 and N30,000       | 89        | 24.3  |
|                    | Between N31,000 and N40,000       | 62        | 16.9  |
|                    | Over N40,000                      | 182       | 49.6  |
|                    | Total                             | 367       | 100.0 |

**Table 1.**  
Result of the  
demography

the sample. This implies that male respondents have dominated the teaching profession in the study area.

The table also shows that the dominant age group was 35 years and below as noted from 50.9%, only 3.3% was 66 years and above of age. The information sought from the respondents about their level of education revealed that 52% of them had National Certificate of Education/National diploma as compared to 28.9% who had bachelor's degree/Higher National Diploma, and 8% who had Master's degree holders.

A majority of the respondents have been in the teaching profession for 10 years and below represented by 52.3% as compared to 11.2% who have been in the profession for 26 years and above. Also majority of the respondents receive a monthly income of over N40, 000 represented by 49.6% compared to 3.0% who receive under N11, 000 in the study area.

4. Discussion and findings

The results showed the ranking mean and standard deviation for each item. The criteria for mean ranking were presented in Table 2. This is to simplify interpretation and comparison between means and ranking scores. A correlation analysis was carried out to assess the relationship between housing finance institutional contexts, finance contexts and beneficiaries' contexts to low-income earners in the study area. The results are presented in Table 3.

The relationship between finance contexts, which are accessibility and affordability, institutional contexts, which are performance and effectiveness, were assessed using Pearson product-moment correlation coefficient. The results showed that there was a moderate, positive correlation between the two variables of housing accessibility and housing affordability at ( $r = 0.387^{**}$ ). However, there was a substantial, positive correlation between housing performance and housing effectiveness at ( $r = 0.690^{***}$ ).

4.1 Discussion

4.1.1 Level of financial context. The findings in the research shows that challenges in accessing housing finance has been a critical problem to the primary school teachers in the study area. This is because they face a lot of difficulties having access to housing finance, which discourages them from approaching the housing finance institutions for housing loan. This concur with the research of Keke et al. (2016) that access to housing finance is a major

Table 2.  
Criteria for mean  
ranking (five-point  
Likert scale)

|   | Description           | Ranges         | Rank |
|---|-----------------------|----------------|------|
| 1 | Excellent             | Above 4.00     | 1    |
| 2 | Very good             | 3.00–3.99      | 2    |
| 3 | Neither good nor poor | 2.00–2.99      | 3    |
| 4 | Poor                  | 1.00–1.99      | 4    |
| 5 | Very poor             | Less than 1.00 | 5    |

Table 3.  
Reliability of field  
results

| Contexts              | Constructs    | Cronbach's alpha | No of items |
|-----------------------|---------------|------------------|-------------|
| Finance context       | Accessibility | 0.780            | 14          |
|                       | Affordability | 0.813            | 15          |
| Institutional context | Performance   | 0.853            | 18          |
|                       | Effectiveness | 0.771            | 17          |

challenge to housing ownership in Nigeria. It was also derived from this study that qualifying for a housing loan was difficult for the respondents in the study area as they could not meet the requisite requirements for accessing the housing finance loan to enable them achieve effective housing ownership. This is so in [Tesfaye \(2007\)](#) that some reasons can be singled out for the inability of the majority of the primary school teachers to be qualified to get access to housing finance loan. The study found out that the primary school teachers in the study area lack the needed collateral to access the housing finance loan. This inability to provide secure collateral is a critical barrier to housing ownership by the low-income earners. This corroborates findings made by [Olotuah \(2015\)](#) that low-income earners are generally unable to raise housing loans because they do not have collateral to access the housing finance loans. The study also shows that another impediment to accessing housing finance from the low-income earners perception is the possibility of succeeding in applying for loan, this is because majority of the respondents did not meet up with the requirements for accessing the housing finance loan in the study area. This coincides with the study of [Dung-Gwom and Mallo \(2011\)](#), which tested for eligibility of low-income earners for credit facilities for home acquisition in Plateau State of Nigeria as the challenges confronting households in the study. In the study location of where beneficiary wants his house to be sited was also an impediment to accessing housing finance; however, [Clark et al. \(2006\)](#) and [Woo and Morrow-Jones \(2011\)](#) confirm the importance of location in housing ownership. The study shows that years of service is not a significant factor in accessing housing finance according to the perception of the respondents because majority of them have spent less than 15 years in service, which will give them the leverage to pay for a long period.

According to [Kuma \(2015\)](#), the duration of loan most times is considered on the basis of the mortgagor's years on his/her current employment, particularly for those in the public sector because the more years in employment, the lesser years left before retirement, hence, the lesser the duration of loan to be granted. Availability of collateral for bank security is a factor that prevents the respondents from affording housing finance loan because they lack the property to use as collateral, which, according to [Ogunnaike \(2017\)](#), suggested a shift from real estate as collateral security for mortgage loan to reduce the hardship in meeting the collateral requirement. From the study, it shows that affordability of monthly repayments is also a hindrance to achieving effective housing finance among low-income earners in the study area, and that is in agreement with the findings of [Aribigbola \(2008\)](#) that the affordability of monthly repayments of respondents is not adequate to access the loans. The study shows that repayment period of the housing loan is also a crucial factor that militates against affordability of housing finance by the respondents. This is in line

|                      | Accessibility | Performance |
|----------------------|---------------|-------------|
| <i>Affordability</i> |               |             |
| Pearson correlation  | 0.387**       |             |
| Sig. (two tailed)    | 0.000         |             |
| N                    | 367           |             |
| <i>Effectiveness</i> |               |             |
| Pearson correlation  |               | 0.690**     |
| Sig. (two tailed)    |               | 0.000       |
| N                    |               | 367         |

**Note:** \*\*Correlation is significant at the 0.01 level (two tailed)

**Table 4.**  
Relationship between  
housing finance  
institutional contexts  
and finance contexts

with the findings of [Atamewan et al. \(2017\)](#) that repayment period automatically disqualifies many respondents from affording housing finance loan. Similarly, [Ariemba \(2011\)](#) posits that repayment period affects affordability to housing finance among low- and middle-income earners in Kenya. The study shows that willingness of renting than buying a house was affordable, as the respondents cannot afford the housing finance loan. In the study, influence of unemployment rate was a least factor that affects affordability, as the respondents are all primary school teachers, which means they are gainfully employed, and this is true for researchers who ascertain that unemployment correlates negatively with housing ownership, which means that employment is thus a major factor to housing ownership ([Lerbs, 2011](#); [Lersch and Dewilde, 2015](#)). The study also identified average monthly income expended on housing units as another factor that affects affordability to housing finance. According to [Nwuba et al. \(2015\)](#), an increase in non-housing expenditures will, all else being equal, result in a decrease in the likelihood of affording homeownership. The cost of houses was also a factor in the study that affected respondents' affordability to housing finance. [Nwuba et al. \(2015\)](#), further observed that rising cost of houses constitute obstacles to housing ownership.

*4.1.2 Relationship between housing finance institutional related variables and financial related variables to low-income earners in Bauchi Local Government Education Authority.* The relationship between financial related variables that are accessibility and affordability were assessed using Pearson product-moment correlation coefficient. The result showed that there was a moderate, positive correlation between the two variables of housing accessibility and housing affordability in the study. This result is in line with existing findings by [Akinjare et al. \(2016\)](#) but is inconsistent with the study of [Ogedengbe and Adesopo \(2003\)](#). The low-income earners in the study area were more concerned with the accessibility and affordability on housing ownership. Also, the performance and effectiveness were assessed using Pearson product-moment correlation coefficient. There was a substantial, positive correlation between housing finance institutional performance and effectiveness in the study area. This finding is in line with [Ajibola et al. \(2012\)](#) and also it is in agreement with that of ([Adewunmi et al., 2009](#)). However, research conducted by [Kama et al. \(2013\)](#) does not consider the agreement of this study.

#### *4.2 Summary of findings*

The study reported that there was a moderate, positive correlation between the two variables of housing accessibility and housing affordability and also there was a substantial, positive correlation between housing performance and housing effectiveness in the study area. The study revealed that effectiveness of financial institutions and performance of the institutions have significant positive causal effect on low-income earners housing ownership context. The study also revealed that institutional contexts have direct causal effect on the finance context and effectiveness and performance have significant effect on accessibility. Similarly, effectiveness and performance have significant causal effect on affordability. The study revealed that finance accessibility does not mediate the relationship between institutional context and beneficiary context, whereas finance affordability mediates the relationship between institutional context and beneficiary context. Thus, performance of housing finance institutions and their effectiveness have direct effects on low-income earners' housing ownership through finance affordability.

### **5. Conclusion**

The low-income earners in the study area were more concerned with the accessibility and affordability on housing ownership and it also shows that performance and effectiveness of

the housing finance institutions is of paramount importance to housing ownership for the low-income earners in the study area. It was recommended that the providers of housing ownership loans should give more emphasis on current approval time of housing loan and level of interest rate. Similarly, emphasis should also be given on the acceptable conditions of loan in terms of their financial performance and effectiveness. Also, repayment period should be longer to enable the beneficiaries pay at ease without much stress and the housing finance institutions should allow for several repayment methods by allowing them to make bulk payments whenever they are opportune to have money to meet the low-income earners dream to effective housing ownership among primary school teachers in Bauchi Local Government Area, Nigeria.

The study concludes that the low-income earners encountered challenges of accessibility and affordability to housing finance loan in Bauchi, which makes housing ownership to be out of their reach. However, accessibility and affordability will enhance the chances of the low-income earners, especially primary school teachers in Bauchi Local Government to meet their dreams to sustainable housing ownership.

## References

- Abadi, D., Boncz, P., Harizopoulos, S., Idreos, S. and Madden, S. (2013), "The design and implementation of modern column-oriented database systems", *Foundations and Trends® in Databases*, Vol. 5 No. 3, pp. 197-280.
- Adediji, Y.D. and Olotuah, A.O. (2012), "An evaluation of accessibility of low-income earners to housing finance in Nigeria", *European Scientific Journal, ESJ*, Vol. 8 No. 12.
- Ademiluyi, I.A. and Raji, B.A. (2008), "Public and private developers as agents in urban housing delivery in Sub-Saharan Africa: the situation in Lagos state", *Humanity and Social Sciences Journal*, Vol. 3 No. 2, pp. 143-150. ISSN 1818-4960 © IDOSI Publications
- Adesegun, Y. (2016), "Challenges of meeting the requirements of low income earners towards public housing access in Abeokuta South local government area, Ogun state", Unpublished thesis, Department of Building, University of Benin Ekpoma, Edo State Nigeria.
- Adewunmi, Y., Ajayi, C. and Ogunba, O. (2009), "Facilities management: factors influencing the role of Nigerian estate surveyors", *Journal of Facilities Management*, Vol. 7 No. 3, pp. 246-258.
- Adshead, M. (2017), *Developing European Regions? Comparative Governance, Policy Networks and European Integration*, Routledge.
- Afrane, S.K. Owusu-Manu, D. Donkor-Hyiaman, K.A. and Bondinuba, F.K. (2016), "Towards innovative housing financing in Ghana: an evidence-based from South Africa's pension housing financing system".
- Ajibola, O.O., Ibadapo-Obe, O. and Sofoluwe, A.B. (2012), "Developing a viable renewable energy policy: a pathfinder to millennium development goals and vision 20: 2020", *International Academy of African Business and Development (IAABD) conference is entitled "African Business and Development in a Changing Global Political Economy: Issues, Challenges and Opportunities*.
- Akinjare, V., Adetiloye, K.A., Akhanolu, I.A. and Tochukwu, O. (2016), "The assessment of the contribution of primary mortgage institutions to housing finance in Nigeria: a case study of union homes savings and loans PLC", *Asian Journal of Information Technology*, Vol. 15 No. 13, pp. 2094-2100.
- Aribigbola, A. (2008), "Housing policy formulation in developing countries: evidence of programme implementation from Akure, Ondo state, Nigeria", *Journal of Human Ecology*, Vol. 23 No. 2, pp. 125-133.
- Ariemba, J.M. (2011), "An investigation of the factors determining access to housing finance by low and Middle income earners in Nairobi", Doctoral dissertation.

- Atamewan, E.E., Eyo, E.E. and Effanga, M.E. (2017), "Appraisal of availability and accessibility to mortgage finance for sustainable housing delivery in Nigeria", *European Scientific Journal November Edition*, Vol. 13 No. 31, pp. 1857-7881. (print) e - issn 1857- 7431.
- Bhagavath, P., Rastogi, P., Menezes, R.G., Valiathan, M., Kumar, T.M., Babu, Y.R. and Nayak, V.C. (2009), "Sudden death due to pulmonary aspergillosis", *Journal of Forensic and Legal Medicine*, Vol. 16 No. 1, pp. 27-30.
- Bhuka, S. (2019), "The contribution of social in promoting women rights on land issues: a case of Kibaha district", Doctoral dissertation, Mzumbe University.
- Braunsberger, K. and Gates, R. (2009), "Developing inventories for satisfaction and likert scales in a service environment", *Journal of Services Marketing*, Vol. 23 No. 4, pp. 219-225.
- Burris, S.H. (2005), "Effect of problem-based learning on critical thinking ability and content knowledge of secondary agriculture students", Doctoral dissertation, University of Missouri–Columbia.
- Chambers, M. Garriga, C. and Schlagenhauf, D. (2008), "The loan structure and housing tenure decisions in an equilibrium model of mortgage choice".
- Chen, C.M., Delmas, M.A. and Lieberman, M.B. (2015), "Production frontier methodologies and efficiency as a performance measure in strategic management research", *Strategic Management Journal*, Vol. 36 No. 1, pp. 19-36.
- Chen, T., Dodds, S., Finsterwalder, J., Witell, L., Cheung, L., Falter, M., Garry, T., Snyder, H. and McColl-Kennedy, J.R. (2020), "Dynamics of wellbeing co-creation: a psychological ownership perspective", *Journal of Service Management*, Vol. 32 No. 3.
- Clark, W., Deurloo, M. and Dieleman, F. (2006), "Residential mobility and neighbourhood outcomes", *Housing Studies*, Vol. 21 No. 3, pp. 323-342.
- Damulak, D.D. (2015), "Housing policy in Nigeria and the growth of urban marginalities: a case study of Karu local government area of Nasarawa state, 2000-2014", Doctoral dissertation, Department of Political Science, Nasarawa State University Keffi.
- Dung-Gwom, J.Y. and Mallo, D.M. (2011), "An appraisal of the challenges of accessing credit for home acquisition by low income earners in Nigeria", available at: [www.gla.ac.uk/media/media\\_129707\\_en.pdf](http://www.gla.ac.uk/media/media_129707_en.pdf) (accessed 29 November 2014).
- Dymski, G. (2018), "Finance and financial systems: evolving geographies of crisis and instability", *Oxford Handbooks*, doi: [10.1093/oxfordhb/9780198755609.013.4](https://doi.org/10.1093/oxfordhb/9780198755609.013.4).
- Ehlenz, M.M. (2018), "Making home more affordable: community land trusts adopting cooperative ownership models to expand affordable housing", *Journal of Community Practice*, Vol. 26 No. 3, pp. 283-307.
- EMIS SUBEB (2017), *Education Management Information System Report*, State Universal Basic Education Board Bauchi, Bauchi State.
- Fernandez, R. and Aalbers, M.B. (2016), "Financialization and housing: between globalization and varieties of capitalism", *Competition and Change*, Vol. 20 No. 2, pp. 71-88.
- Fernando, J.R. and Nimal, P.D. (2014), "Does risk management affect on bank efficiency? An analysis of Sri Lankan banking sector", *International Journal of Management and Sustainability*, Vol. 3 No. 2, pp. 97-110.
- FixusJobs.com (2017), available at: [www.legit.ng/1138849-teachers-salary-scale.nigeria.html](http://www.legit.ng/1138849-teachers-salary-scale.nigeria.html)
- Gan, Q. and Hill, R.J. (2009), "Measuring housing affordability: looking beyond the median", *Journal of Housing Economics*, Vol. 18 No. 2, pp. 115-125.
- Gavu, E.K. and Owusu-Ansah, A. (2019), "Empirical analysis of residential submarket conceptualisation in Ghana", *International Journal of Housing Markets and Analysis*, Vol. 12 No. 4.
- Green, S.D. (2017), "Testing Fannie Mae's and Freddie Mac's post-crisis self-preservation policies under the fair house act", *Cleveland State Law Review*, Vol. 66, p. 477.



- 
- Gruman, J.A. and Saks, A.M. (2011), "Performance management and employee engagement", *Human Resource Management Review*, Vol. 21 No. 2, pp. 123-136.
- Hawaladar, I.T., Lokesh, L., Kumar, A., Pinto, P. and Sison, S.M. (2017), "Performance analysis of commercial banks in the kingdom of Bahrain (2001-2015)", *International Journal of Economics and Financial Issues*, Vol. 7, pp. 729-737.
- Hernandez, J. (2009), "Redlining revisited: mortgage lending patterns in Sacramento 1930-2004", *International Journal of Urban and Regional Research*, Vol. 33 No. 2, pp. 291-313.
- Ibrahim, K. and Mbamali, I. (2013), "Availability of housing financing funds for private estate developers in Abuja, Nigeria", in *Proceeding of Sustainable Building Conference, Nigeria (July 25, 2013)*.
- Kama, U., Yakubu, J., Bewaji, P., Adigun, M.A., Adegbe, O. and Elisha, J.D. (2013), "Mortgage financing in Nigeria", *Central Bank of Nigeria Occasional Paper* (50).
- Keke, O.V., Emoh, F.I. and Ogunsina, O. (2016), "Evaluation of the suitability of adopting public private partnership for housing provision in Anambra state", *Global Journal of Advanced Research*, Vol. 3 No. 4, pp. 298-302.
- Krejcie, R.V. and Morgan, D.W. (1970), "Sample size determination table", *Educational and Psychological Measurement*, Vol. 30, pp. 607-610.
- Kuma, S.S. (2015), "Assessing the challenges of access to housing finance in the North Central states of Nigeria", *Ethiopian Journal of Environmental Studies and Management*, Vol. 8 No. 2, pp. 161-170. ISSN:1998-0507.
- Kumar, S. and Gulati, R. (2009), "Measuring efficiency, effectiveness and performance of Indian public sector banks", *International Journal of Productivity and Performance Management*, Vol. 59 No. 1, pp. 51-74.
- Kung, L., Cegielski, C.G. and Kung, H.J. (2015), "An integrated environmental perspective on software as a service adoption in manufacturing and retail firms", *Journal of Information Technology*, Vol. 30 No. 4, pp. 352-363.
- Lerbs, O. (2011), "Is there a link between homeownership and unemployment? Evidence from German regional data", *International Economics and Economic Policy*, Vol. 8 No. 4, pp. 407-426.
- Lersch, P.M. and Dewilde, C. (2015), "Employment insecurity and first-time homeownership: evidence from twenty-two European countries", *Environment and Planning A: Economy and Space*, Vol. 47 No. 3, pp. 607-624.
- Louçã, F. and Ash, M. (2018), *Shadow Networks: Financial Disorder and the System That Caused Crisis*, Oxford University Press, USA.
- Mader, P. and Sabrow, S. (2019), "All myth and ceremony? Examining the causes and logic of the mission shift in microfinance from microenterprise credit to financial inclusion", *Forum for Social Economics*, Vol. 48 No. 1, pp. 22-48.
- Meyer, K.E., Ding, Y., Li, J. and Zhang, H. (2018), "Overcoming distrust: how state-owned enterprises adapt their foreign entries to institutional pressures abroad", *State-Owned Multinationals*, Palgrave Macmillan, Cham, pp. 211-251.
- Mukhtar, M.M., Amirudin, R. and Mohamad, I. (2016), "Housing delivery problems in developing countries: a case study of Nigeria", *Journal of Facilities Management*, Vol. 14 No. 4.
- Mulliner, E., Malys, N. and Maliene, V. (2016), "Comparative analysis of MCDM methods for the assessment of sustainable housing affordability", *Omega*, Vol. 59, pp. 146-156.
- Nancekivell, S.E., Friedman, O. and Gelman, S.A. (2019), "Ownership matters: people possess a naïve theory of ownership", *Trends in Cognitive Sciences*, Vol. 23 No. 2, pp. 102-113.
- Nwuba, C.C. and Chukwuma-Nwuba, E.O. (2018), "Barriers to accessing mortgages in Nigeria's housing markets", *International Journal of Housing Markets and Analysis*, Vol. 11 No. 4.

- Nwuba, C.C., Kalu, I.U. and Umeh, J.A. (2015), "Determinants of homeownership affordability in Nigeria's urban housing markets", *International Journal of Housing Markets and Analysis*, Vol. 8 No. 2, pp. 189-206.
- Obi, J.N. and Uwandu, I.A. (2015), "The effect of poor corporate governance on the performance of Nigerian banks", *African Journal of Innovative Research and Advanced Studies*, Vol. 3 No. 1, pp. 1-44.
- Ogedengbe, P.S. and Adesopo, A.A. (2003), "Problems of financing real estate development in Nigeria", *Journal of Human Ecology*, Vol. 14 No. 6, pp. 425-431.
- Ogunnaike, A.O. (2017), *Enhancing Homeownership Opportunities among Middle-Income Earners in Nigeria: A Case Study of Lagos Metropolis*, University of the West of England.
- Okewole, I.A. and Aribigbola, A. (2006), "Innovations and sustainability in housing policy conception and implementation in Nigeria", *The Built Environment: Innovation Policy and Sustainable Development*, pp. 414-420.
- Olateju, B. (1990), "Innovating building materials: application for cooperative housing development", A paper presented at the National Workshop on Housing Cooperative for Nigeria. Obafemi Awolowo University, Ile-Ife, 17th-18th December.
- Olotuah, A.O. (2015), "Accessibility of low-income earners to public housing in Ado-Ekiti, Nigeria", Civil and Environmental Research ISSN 2224-5790 (Paper) ISSN 2225-0514 (Online) Vol.7, No. 7.
- Opoko, P.A. and Oluwatayo, A.A. (2014), "Trends in urbanisation: implication for planning and low-income housing delivery in Lagos", *Nigeria Architecture Research*, Vol. 4 No. 1A, pp. 15-26.
- Pallant, J. (2011), "Non-parametric statistics", *SPSS Survival Manual*, 4th ed., Allen and Unwin, Crows Nest, pp. 213-238.
- Patton, A.S. (2015), *The Intelligence of Healing: Black American Ethnomedicine as Alternative Knowledge*, MI State University.
- Pepurah, J.A. and Obeng, C.K. (2015), "Microfinance regulation in Ghana: missing issues and implications for efficient financial system", Retrieved November 9, 2017.
- Peters, G.W. and Panayi, E. (2016), "Understanding modern banking ledgers through blockchain technologies: future of transaction processing and smart contracts on the internet of money", *Banking beyond Banks and Money*, Springer, Cham, pp. 239-278.
- Razak, L.A. and Saupi, M.N. (2017), "The concept and application of ḍamān al-milkiyyah (ownership risk)", *ISRA International Journal of Islamic Finance*, Vol. 9 No. 2, pp. 148-163.
- Renaud, B.M. (2008), "Mortgage finance in emerging markets: constraints and feasible development paths", *Mortgage Markets Worldwide*, pp. 253-288.
- Ricks, M. (2018), "Money as infrastructure", *Columbia Business Law Review*, Vol. 757.
- Rolnik, R. (2013), "Late neoliberalism: the financialization of homeownership and housing rights", *International Journal of Urban and Regional Research*, Vol. 37 No. 3, pp. 1058-1066.
- Ryan-Collins, J., Lloyd, T. and Macfarlane, L. (2017), *Rethinking the Economics of Land and Housing*, Zed Books.
- Sendi, R., Filipovič Hrast, M. and Kerbler, B. (2019), "Asset-based welfare: is housing equity release a viable option for pensioners in Slovenia", *Journal of European Social Policy*, Vol. 29 No. 4, pp. 577-589.
- Seshadhri, G. and Topkar, V. (2014), "Validation of a questionnaire for objective evaluation of performance of built facilities", *Journal of Performance of Constructed Facilities*, Vol. 30 No. 1, p. 04014191.
- Shepherd, C. and Günter, H. (2010), "Measuring supply chain performance: current research and future directions", *Behavioral Operations in Planning and Scheduling*, Springer, Berlin, pp. 105-121.
- Stevens, M.L. and Gebre-Medhin, B. (2016), "Association, service, market: higher education in American political development", *Annual Review of Sociology*, Vol. 42 No. 1, pp. 121-142.

- Tesfaye, A. (2007), "Problems and prospects of housing development in Ethiopia", *Property Management*, Vol. 25 No. 1, pp. 27-53.
- Thomas, P.G. (2014), "Customer perception towards housing loans – a study with reference to public and co-operative sector banks in Kollam", *International Journal of Management and Social Science Research Review*, Vol. 1 No. 2, pp. 79-82.
- Udoka, C.O. and Kpataene, M. (2017), "Mortgage financing and housing development in Nigeria", *International Journal of Research -GRANTHAALAYAH*, Vol. 5 No. 5, pp. 182-206.
- Wahab, A.K. (2006), "Federal government economic reforms, human development and due process", A paper delivered at the first annual lecture of the School of Environmental Technology, Federal University of Technology, Akure.
- Warnock, F. and Warnock, V. (2008), *Markets and Housing Finance*, National Bureau of Statistics.
- Woo, M. and Morrow-Jones, H.A. (2011), "Main factors associated with homeowners' intentions to move", *International Journal of Urban Sciences*, Vol. 15 No. 3, pp. 161-186.

### Further reading

- Buckley, R. and Kalarickal, J. (2004), *Shelter Strategies for the Urban Poor: Idiosyncratic and Successful, but Hardly Mysterious*, The World Bank.
- Willits, F.K., Theodori, G.L. and Luloff, A.E. (2016), "Another look at Likert scales", *Journal of Rural Social Sciences*, Vol. 31 No. 3, p. 126.

### Corresponding author

Moses Jonathan Gambo can be contacted at: [mjgambs@gmail.com](mailto:mjgambs@gmail.com)