A MODEL FOR EFFECTIVE NATIONAL HOUSING FUND IN NIGERIA

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A thesis submitted in fulfilment of the requirements for the award of the degree of Doctor of Philosophy

Faculty of Built Environment and Surveying
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FEBRUARY 2021

DEDICATION

I dedicate this thesis to the Lord Almighty, the Immortal and Invisible one who marvellously assisted me throughout the PhD journey.

Glory be to His holy name. Amen.

ACKNOWLEDGEMENT

This thesis enjoyed the contributions of a plethora of individuals, academicians, researchers, and professionals. Their input has led to the success of the programme, having positively influenced my reasoning and academic understanding. Essentially, my sincere appreciation goes to my praiseworthy supervisor, Professor Sr. Dr. Hishamuddin Mohd Ali, for his multifarious words of encouragement, constructive criticism, pieces of advice, motivation, support, mentorship and for never getting tired of my curious nature. The programme could not have been successfully completed without his immense contributions, support and unprecedented motivation.

I am also indebted to the Federal Government of Nigeria and Federal Polytechnic, Ado-Ekiti, Ekiti State, Nigeria, for the intervention fund for the PhD study through Tertiary Education Trust Fund (TETFUND). My spiritual fathers, mothers, brothers and sisters in Nigeria and Malaysia are all acknowledged, precisely for their support in prayers and communications.

To my incomparable parent and siblings, Late Mrs Odusade Adediran, Surveyor and Mrs Felix-Funke Ajibade, TemiTope; Oluwaseyi, Temiloluwa, Nifemi, Adetona, Pipeoluwa, Omosileola and Mofoluwato, I remain indebted to you all. Thank you and God bless you for your support through the thick and thin lines. To my priceless crown, teacher and best friend, Samuel Mofoluwa Ajibade. My dear Husband, I am short of words in showing my gratitude to you. Your prayers, patience, constant communications, watchfulness over our son and our home during my absence and copious words of encouragement are all penned down for acknowledgement. To our God given wonderfully created heritage, Jefferysn Mofolafoluwa Ajibade; you are mostly appreciated, particularly for the forbearance and sense of understanding that you have despite your age.

My fellow postgraduate students are recognised for their support, while all my family members are equally acknowledged, especially Tomilayo Petirin, the family of Ezekiels, Lee, Oladejos, Olajides, Oladokuns, Tijanis, Abimajes, Igwes, Movehs, Dr Opeyemi Williams and others that cannot be mentioned.

Thank you all

ABSTRACT

The housing sector and homeownership are characterized by a number of benefits which have significant impacts on human lives and economic growth. Effective housing finance system, therefore, plays a key role in assuring the realization of such benefits. Despite the existence of successful housing finance models across countries, Nigeria housing finance system is yet to have a model that supports the operation of government initiated National Housing Fund Scheme, a source of housing mortgages for the public servants and private housing developers. To put it succinctly, housing finance in Nigeria has been ineffective, while workable policies appear to be a long way off the entire policy. This study seeks to fill this gap by developing a model for an effective National Housing Fund Scheme to aid homeownership in the country. This study has three objectives: 1) to identify the constraints affecting National Housing Fund Scheme loan transactions; 2) to develop a model and action plan for effective national housing fund in Nigeria through identified indicators, and 3) to validate the implementation model for effective national housing fund in Nigeria. In accomplishing the research goal, four stages of survey were performed. In Stage 1, interviews were conducted with housing related professionals, academics and mortgage institution officials; in Stage 2, four hundred and fifteen questionnaires were administered among public workers across the southwest of Nigeria; in Stage 3, a two-stage FGD was conducted involving fourteen individuals consisting of housing related professionals, academics, public servants and housing finance experts, and in Stage 4, a questionnaire survey on model validations was carried out with twenty-seven housing experts. SPSS, Structural Equation Model and NVivo were used to analyse the obtained data. The results show that the facilitation of effective National Housing Fund Scheme in Nigeria falls under three categories namely Macro-economic operations, Micro-economic operation and Action Plan, which were then pooled together to develop a model for effective National Housing Fund. A pool of experts unanimously gave their support to the appropriateness, validity and easy comprehension of the model, suggesting its validity. The capacity of the Model in providing guides to all stakeholders on housing mortgage transactions was also confirmed. Based on the findings, the dual stages of effective National Housing Fund Model are essential in enabling concerned individuals or groups to better understand their roles in Housing Finance Originations and subsequent transactions towards stakeholders' homeownership.

ABSTRAK

Sektor perumahan dan pemilikan rumah dicirikan dengan pelbagai faedah yang mempunyai kesan yang ketara terhadap kehidupan manusia dan pertumbuhan ekonomi. Oleh itu, sistem pembiayaan perumahan yang berkesan memainkan peranan penting dalam menjamin kesedaran terhadap manfaat tersebut. Walaupun terdapat model pembiayaan perumahan yang berjaya di seluruh negara, sistem Pembiayaan Perumahan Nigeria belum mempunyai model yang menyokong operasi Skim Tabung Perumahan Negara yang dimulakan oleh kerajaan, sumber gadai janji perumahan untuk penjawat awam dan pemaju perumahan swasta. Secara ringkasnya, pembiayaan perumahan di Nigeria didapati tidak berkesan, sementara dasar yang sepatutnya dapat dilaksanakan masih jauh dari keseluruhan dasar tersebut. Kajian ini bertujuan untuk mengisi jurang ini dengan membangunkan model bagi skim Tabung Perumahan Negara yang berkesan untuk membantu pemilikan rumah di negara ini. Kajian ini menggunakan tiga objektif: 1) untuk mengenal pasti kekangan yang mempengaruhi urus niaga Pinjaman Skim Tabung Perumahan Negara; 2) untuk membangunkan model dan rancangan tindakan untuk Tabung Perumahan Negara yang efektif di Nigeria melalui indikator yang dikenal pasti; 3) untuk mengesahkan model pelaksanaan dana perumahan nasional yang efektif di Nigeria. Bagi mencapai matlamat penyelidikan ini, empat peringkat tinjauan dilakukan. Pada peringkat 1, sepuluh temu bual dilakukan dengan para profesional yang mempunyai kaitan dengan perumahan, akademik dan pegawai institusi gadai janji; di peringkat 2, empat ratus lima belas soal selidik diedarkan dalam kalangan pekerja awam di seluruh barat daya Nigeria; di peringkat 3, 2 peringkat FGD dijalankan dengan melibatkan empat belas individu yang terdiri daripada profesional yang berkaitan dengan perumahan, akademik, penjawat awam dan pakar kewangan perumahan, dan di peringkat 4, tinjauan soal selidik mengenai pengesahan model dijalankan dengan menggunakan dua puluh tujuh pakar perumahan. SPSS, Model Persamaan Struktur dan NVivo digunakan untuk menganalisis data yang diperoleh. Hasil kajian menunjukkan bahawa pemberian kemudahan skim Tabung Perumahan Negara yang berkesan di Nigeria berada di bawah tiga kategori iaitu operasi makro-ekonomi, operasi mikroekonomi dan Pelan Tindakan, yang kemudian disatukan untuk membangunkan Model Tabung Perumahan Negara yang berkesan. Kumpulan pakar dengan sebulat suara memberi sokongan mereka terhadap kesesuaian, kesahan dan kefahaman model yang mudah yang menunjukkan kesahihannya. Kapasiti model ini dalam menyediakan panduan kepada semua pihak yang berkepentingan ke atas urus niaga Gadai janji Perumahan juga disahkan. Berdasarkan dapatan kajian, dua peringkat Model Tabung Perumahan Negara yang berkesan sangat penting untuk membolehkan Individu atau kumpulan yang berkenaan memahami peranan mereka dengan lebih baik dalam Organisasi Pembiayaan Perumahan dan urus niaga berikutnya ke arah pemilikan rumah pihak berkepentingan.

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LIST OF ABBREVIATIONS

APRA - Australian Prudential Regulation Authority

ASIC - Australian Securities and Investment Commission

ASUP - Academic Staff Union of Polytechnics

AVE - Average Variance Explained

BUMPAN - Building Materials Producers Association of Nigeria

BDGs - Bureau De Change

CB-SEM - Co-Variance-Based SEM

CR - Credit Ration

CCLO - Causes of Complexity in Land Ownership

C of O - Certificate of Occupancy

CMLT - Causes of Complexity in Mortgage Loan Transactions

CDC Colonial Development Corporation

CFA Component Factor Analysis

CR Composite Reliability

DHs Discount Houses

DMBs Universal Deposit Money Bank

ENHF Effective National Housing Fund

EFA Exploratory Factor Analysis

FGD Focus Group Discussion

FMFL Federal Mortgage Finance Limited

FHA Federal Housing Authority

FCs Finance Companie

FMBN Federal Mortgage Bank of Nigeria

FMOF Federal Ministry of Finance

FA Factor Analysis

GRA Government Residential Areas

GFC Global Financial Crisis

GDP Gross Domestic Product

HTMT Heterotriat-Monotriat Ration of Correlations

IFC International Finance Corporations

IGHF Issues of Government Housing Finance Scheme

IPMA International Project Management Association

KMO Kaiser-Meyer-Olkin

KPMG Klynveld Peat Marwick Goerdeler

LVT Loan-to-Value Ratio

LEDB Lagos Executive Development Board

MFBs Microfinance Banks

NAICOM National Insurance Commission

NASU Non-Academic Staff Union of Nigeria

NBS Nigerian Building Society

NDIC Nigeria Deposit Insurance Company

NGO Non-Governmental Organizations

NHF National Housing Fund

NMRC Nigeria Mortgage Refinancing Company

PBT Profit Before Tax

PENCOM National Pension Commission

PLS Partial Least Square

PMI Primary Mortgage Institutions

REDAN Housing Development Board

REIT Real Estate Development Trust

RMBS Residential Mortgage-Backed Security

SPSS Statistical Package for Social Sciences

SEM Structural Equation Modelling

SSA Sub-Sahara African Countries

SSANU Senior Staff Association of Nigeria Universities

SEC Security Exchange Commission

UN United Nation

UNO United Nations Organization

UNICEF United Nations International Children's Emergency Fund

UDB Urban Development Bank

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CHAPTER 1

INTRODUCTION

1.1 Motivation

Housing is a necessity and human right which trails after food and clothing. To every individual, housing is regarded differently. This could be a living space instead of a place to sojourn, while to most people housing supersede a mere accommodation. Across different communities, housing indicates individual's personality and living standard, and it is essential for urban and rural areas' sceneries. The preference for housing in attaining a decent living standard in every nation cannot be jettisoned (Ajibola *et al.*, 2012). Across countries the increase in global urbanization is growing at a fast pace with a dual tension on housing delivery, which then offer a pressure on housing finance scheme. More than 1 billion individuals were reported to have lived in an inadequate accommodation in the wake of the Millennium however, 1.6 billion representing a third of urban residents across the globe was further proposed to struggle for decent accommodation in relation to finance by 2025 (UN-Habitat, 2004; Gilbert, 2014).

Generally, housing as an artefact refers to a product of construction activities relating to space, lighting, sanitary amenities, convenience and heating, its importance in form of a structure and facilities that offer an environmental condition is often mentioned in literatures across the globe. More so, there is a strong link between housing development process; neighbourhood planning; urban and regional planning; environmental management, and most importantly the available finance system which serve as the foundation for the implementation of the former (Opoko and Oluwatayo 2014: Festus and Amos, 2015). Since 1992, UN Conference on Environment and development noted the fundamental section of Housing in relation to human operations; the social, physical and psychological life. This as a veritable institution, creates a complex set of purpose beyond home delivery by offering a social unit of

space for people's residences regardless of age, status and sex differences (Aribigbola, 2005). Two years following the country's independence, her first National Development plan policy was formulated from 1962-1968, the key objectives of this plan was to development opportunities to enhance the education, employment and health system while improving the acess to such opportunities. This plan however failed as more than half of the required resources to establish it was expected to come from the external source but around fourty percent of the requirements was supplied. (Lawal and Oluwatoyin, 2011). The second national development plan of 1970-1974 gave priorities more to the transportation system, defence, electricity, agricultural sector, water supply, communication system and social service provision, as part of its objective. Although the plan described housing as one of the total essentials for man's physical survival, as it often enhances individual status across countries, while serving as a significant linkage between human health, individual and economic productivity, Nigerian societies inclusive yet, the did not profer solution to the housing need of the country as little attention and resources was provided towards the sector (Ayedun and Oluwatobi, 2011).

Noteworthy is that housing development keeps driving the economies of several nations esp ecially the developed ones while offering several opportunities of ownership and investment to households and individuals within developing nations (Adedeji and Olotuah 2012; O'Neill, Ren et al., 2012). The Asian and African countries have been proposed to host about 2.66 billion and 748 million populations by 2030 respectively and there remains a high level of housing deficit within these nations, because housing demands keep increasing in line with urbanization, with a rising request for finance to fund liveable housing development. Most citizens across developed economies do enjoy housing mortgages through non-equity capital than in developing countries such as housing loan; effective savings and so on. This is common among the low-medium-income groups owing to their inability to meet their house needs and other household's necessities within their equity capital. Where these groups pay a considerable part of their earnings for housing price, they often become impoverished and disadvantaged. Although they could slightly manage to avail themselves of a substandard shelter with their little income against the adverse and extreme climatic conditions, that could otherwise aggravate their livelihood's

susceptibility over their other necessary needs (Obi and Ubani, 2014; Brueckner and Lall, 2015).

Contrarily, several African countries is facing plethora of challenges nowadays both in terms of housing finance, accessibility and affordability. Thus, housing occupation and ownership by the larger population have created exceptional and fundamental issue which several governments have so long battled with no substantial result. This is highly significant in Nigeria and has been reported to keep increasing drastically to 2.7 billion, from 2013 to 2050 (World Bank, 2013; Chukwu 2014). Hence, Warnock and Warnock (2012), noted the relevance of external housing finance in aiding the attainment of housing delivery and ownership within economies as the financing of houses entails the provision of a large amount of money usually through mortgages. However, author further noted the inadequacy of such instrument in improving housing deficit across nations. Housing demands across Nigeria outweighs the existing stock, with a result of cumulative shortages, subject to Policy which hamper the provision of adequate mortgage or housing finance channels to meet the increasing demands of the growing urban inhabitants (Hove et al., 2013; Basorun and Fadairo, 2012; Nubi, 2015). For instance, housing demand stood at 15 million in 2007 with a requirement of 12 trillion naira to offset this demand has been increasing by 780, 000 units annually against the current productions of 100,000 yearly which is seen to be higher than the 700,000 estimated by the world bank in 2015 partly due to the unceasing and lack of control in the birth rate across the country. While the centre for affordable housing as reported in Oni-Jimoh and Liyanage, (2018), estimated that around \$360 billion will be is required to offset the housing deficit witt an assumption of spending above \$10,000 per unit in different states, 60% of the required houses are needed to be delivered in urban centres. Amao and Odunjo (2013) put the housing stock at 23 per a thousand inhabitant while FMBN in 2015 declare the required houses across the country to be between 17million to 20 million (Anthony et al., 2016). Noteably, due to the big difference in the available houses and required units, the cost of existing houses is often more than 30% earnings of the existing income classes in the country. While 50% of the population lives in the urban centres, around 80% are reported of the urban residents are reported to be either homeless or residing in an unaffordable/substbadard houses due to the high cost of houses (World Bank 2018 and Oni-Jimoh and Liyanage, 2018). Generally, quantitative and qualitative shortages,

Government's inattentiveness to citizens need, lack of accessibility to developable land, homelessness, low income versus high housing cost, specification and space standard in relation to housing cost, high interest rate on housing loans are most issues affecting house ownership in the country (Ibimilua and Ibitoye, 2015). Similar to this Ademiluyi and Raji, (2008), observed that no country has sufficiently delivered adequate housing to her entire population, both within the poor, rich, developed and developing countries, however the case of Nigeria is revolting. The housing shortfall distribution across some nations is shown below and this justify that housing ownership exceeds mere geographical borders by cutting across nations which makes it a global problem.

Table 1.1 Housing Deficits Within Some Countries

SN	COUNTRY	HOUSING DEFICIT	YEAR	SOURCE/YEAR
1	Canada	1.5 million units	2013	Moore, 2013
2	Nigeria	17 to 20 million units	2020	Eni. 2015; Anthony et al., 2016; Ade-Ojo and Ogunsemi, 2019; Saidu, and Yeom 2020
3	Algeria	2, Million units	2002- 2019	World Bank, 2002; Belahya, and Boubekri 2019
4	Zambia	846,000 units	1996	Gardner, 2007
5	Ghana	1.7 million units	2013	Doreen Andoh/Daily Graphic/Ghana, 2006; Ofor et al., 2018
6	Kenya	150,000 units	-	Rono, 2007
7	China	2-3 million units	-	Lee, 2007
8	Democratic Republic of Congo	240,000 units,	2007	DRC, 2007
9	South Africa	650,000 units	-	RUST, 2007
10	Uganda	1.5 million units	-	Uganda Population Secretariat, 2007
11	Zimbabwe	670,000 units,	1992	Tibaijuka , 2005a
12	USA	636,000 units	2011	Singer, 2014
13	Ethiopia	73,000-151,000	2006	UN-HABITAT, 2006
14	India	24.71 million units	2007	India Micro finance, 2010
15	Morocco	800,000 units	-	САНА, 2015
16	Cameroon	70,000 units	-	UN-HABITAT, 2006

SN	COUNTRY	HOUSING DEFICIT	YEAR	SOURCE/YEAR
17	Tanzanian	3 million units	-	Kavishe <i>et al</i> ,. 2019
18	Brazil	6 million	2014	Dalbem, et al., 2019

Sources; Author's research

Home ownership rates in the country stands at 25% compare to countries like Singapore, Republic of Benin, Kenya, Libya, United State of America and south Africa where about 90, 63, 73, 41, 70, 41 and 56 percent of residents are home owners respectively (Taiwo 2018; Independent Newspapers Limited, 2015). This indicates that the country seriously lack homeownership in relation to the wide gap between housing construction cost and workers income. Most of the state of the country are unable to meet the residents' housing stock requirement while population keep increasing, with a report of over 170 million in 2015 and 195.8 million in 2018, 200.9 million in 2019 and 206. 1 million in 2020 (Independent Newspapers Limited, 2015; Oni-Jimoh and Liyanage, 2018; Varrella, 2020). Housing scarcity in Nigeria was put at 16 million units, in 2009 with a rough estimate of USD40 billion to handle it (Basorun and Fadairo 2012), this further upsurge by additional 1 million to make 17 million shortages, with a yearly increase of 20% (Alufohai, 2013; Akinbogun *et al.*, 2019).

Mortgage debt outstanding which exist above 77% in USA, 83% in Netherlands, 80% in UK, 50% in Hong Kong, 33% in Malaysia, 109% in Denmark and 61% in Singapore, GDP with a significant impact on their housing sector, amounts to less than 1% and 5% in Rwanda and Nigeria's GDP among some other low to middle income countries within Africa (Badev, *et al.*, 2014; FSS, 2020). More so, such mortgages have gained more recognition with strong flexibility of repayment in some countries, and have stimulated the home ownership rates. In Ngeria homeownership is put at 10% compare to countries like Colombia with 50%, USA 72% Philippines 80%, Canada 68% UK 78%, Romania 96.1%, Singapore 92%, South Africa 56%, Brazil, 74% Chile 69%, China 60%, Sri Lanka 82%, Korea 54%, Malaysia 76%, Germany, 43% Italy, Greece and Spain 80% (Campbell, 2013; FSS, 2020). Although Campbell, (2013), argued that such statistics might not be directly related to a strong mortgage

depth, however, other sources of debt funding alongside relative support from infrastructure delivery and research has been significant in those countries with little impact in Nigeria. It is underlined that a suitable arrangement to improve housing through the mortgage scheme of the country can aid opportunities for a better focus on resources required to improve her general housing condition in the country (Akinyode *et al.*, 2015). Further, the Annual minimum wage of the country is 216,001 while most low- and medium-income groups earns between 216,001 and 864, 000 annually, (USD 600-2400) with 30% annual income spent housing service, this approximately between USD 180-720 (Oni-Jimoh and Liyanage, 2018). Hence, this affect household's housing finance affordability in Nigeria.

Table 1.2 below indicates the housing shortages across the country between 1991 to 2012, it suffice to say this has been the only data available on the National housing stock of the country (Adebowale et al., 2017). Prior to this, Ademiluyi, (2010), noted the dearth of exact information on the country's housing stock which is also related to the country's overall qualitative and quantitative housing issues. Worthy of note is that the population grew from 170million in 2015 to 206.1million as at 2020 while the housing deficit is between 17 and 20 million (Anthony et al., 2016; Oni-Jimoh and Liyanage, 2018; Saidu, and Yeom 2020).

Table 1.2 Household Shortages Across the Country

Years	Deficit Figure	Population	Ratio	Reasons
1991	7.0 million	88.9million	7.87	Mortgage issues
1993	8.0million	98.9million	8.16	Mortgage issues
2007	12 to 14million	143million	9.79	Low housing supply
2010	16million	156million	10.25	Overpopulation
2011	17million	160million	10.62	Overpopulation and lack of finance
2012	18million	167million	10.77	Lack of finance, slum houses and poverty
2015	17million	181, 137.5million	10.89	Lack of finance, slum houses and poverty
2016	17 million above	185,960.2 million	115.2	Lack of finance, slum houses and poverty
2017	17 million above	190,873.2million	115.2	Lack of finance, slum houses and poverty

Years	Deficit Figure	Population	Ratio	Reasons
2018	17 million above	195.874.7million	115.2	Lack of finance, slum houses and poverty
2019	17 million above	200.963.6million	117.2	Lack of finance, slum houses and poverty
2020	17-20 million above	206.139.6million	117.2 above	Lack of finance, slum houses and poverty

Sources: Property Max Data & Statistics IMF, CIA, World Fact book inside, Euromonitor International, Agunbiade *et al.*, 2013; Nubi, 2015; Oni-Jimoh and Liyanage, 2018; Varrella, 2020; Aliyu and Chunho, 2020.

As reported by Dermographia world urban areas in Oni-Jimoh and Liyanage, (2018) over 500,000 people resides in most of the country's urban centers with an unceasing increase vis-à-vis constant housing demand. Having a population above 206 million, the country's poverty rate was put at 50.1%, with an indication of the little improvement made on the citizens income, most especially those in the low-income/poorest line who are half of the population, which is unarguably part of the cause of housing deficit in the country (Sattar, 2020). An average count of household was recorded at 4.7 members in 2018 with an indication of rural household having a larger percentage than those in the urban centers hence, while the urban household count was pegged at 4.7, rural household dwellers was put at 5.1 %, with some data indicating a widespread of household having eight and above members in the country's rural settings (Varrella, 2020). Table 1.3 shows the population of urban centers which stand above 500,000 there by indicating the reason why housing shortages are been intense in the country.

Table 1.3. The biggest urban areas in Nigeria with over 500,000 population

Urban centres	Population	Urban centres	Population
Lagos	13,910,000	Ibadan	3,070,000
Ogbomosho	505,000	Lokoja	570,000
Onitsha	7,850,000	Abuja	2,605,000

Abeokuta	540, 000	Akure	630,000
Kano	3,875,000	Uyo	2,230,000
Bauchi	560,000	Osogbo	715,000
Zaria	750,000	Port Harcourt	2,060,000
Enugu	755,000	Nsukka	1,840,000
Benin City	1,455,000	Warri	770,000
Maidugurri	795,000	Aba	1,290,000
Ikorodu	825,000	Owerri	815,000
Kaduna	1,140,000	Ilorin	935,000
Jos	830,000	Sokoto	620,000

Sources: Oni-Jimoh and Liyanage, (2018)

1.2 Problem Statement

Several problems confront the Sub-Sahara African (SSA) nation's urban areas, this include but not limited to enormous disdains of urban development and planning, housing and related finance services, traffic congestion, urban sprawl and poor environment (Olvera *et al.*, 2008; Potts, 2011). A lot of scholars have ascribed this to the unceasing population increase within the cities. For instance, Nigeria's migration rate; from rural to urban areas keep increasing since 1960. Like other countries, this has caused extensive expansion within its cities as the nation's cities have increased drastically since 1960. This indicate that the 45million population that existed in 1960 increased into 99.9million recently. That between 48.9 and 50% of the current 206.million plus Nigerians dwell in cities according to Dover and Delaware, 2018 in (Oni-Jimoh and Liyanage, 2018).

Among the significant problem in the country, housing situation is a big problem requiring relentless Policy attention from all angle (Tipple, 1994; Lwasa 2014). With around 10.7 million housing stock, there still exist a shortage of about 17 million houses in the country of over 206.1 million population, and an annual growth of 2.8 percent. This shortages arises with a consequence of economic and social issues

(Alufohai, 2013; Independent newspaper limited, 2015; FSS, 2020; Verralla, 2020). Noteworthy is that only 5% out of the existing housing stock was delivered through formal mortgages while 95% of the homes are built with equity/savings in relation with a dead asset (FSS, 2020). Some of the existing houses in the country could be regarded as slum; with an accumulation of 70% in the housing stock, this slum has a projected 4.55% yearly increment (Bah et al., 2018). Notably, the public sector workers of the country who are 80% of its population are often hampered due to poor access to mortgages vis-a-vis their irregular and low income (Ogunbajo et al., 2015; Ankeli, et, al., 2017). Across the country, the public servants' remuneration package affects their homeownership as well as loan repayment through their monthly income. As noted by the country's Director of recruitment and Appointment in 2003, most of the public workers are the most underprivileged and unhappy income earners with regards to homeownership as they cannot afford to rent or own their desired house within their income when compare to the rising cost of living and high cost of building materials in the country. The government's inability to stimulate an effective housing finance scheme that recognizes the condition of this group have constituted a challenge to the entire nation. Despite the public workers being a stakeholder in the government's housing finance scheme, mortgage facilities and home loans appears inaccessible especially to the middle- and low-income class within this sector who cannot finance homeownership within their salary, due to the stringent conditions often attached to it by mortgage institutions.

In his study on ''improving housing fund modelling in Nigeria'' Ogunba, (2009), noted that billions of naira pooled into the NHF from inception was not utilized due to weak policy and limited number of primary mortgage institution, despite the mandated contribution into the scheme for onward accessibility of public servants' housing loans. This corroborate with the report of (Alamu 2012; Adepoju and Olatoye, 2015), who noted that almost 100% of the public servant are yet to benefit from the scheme despite their regular contribution and applications. While a total of 28 states out of the 36 states of the federation are active contributors of the scheme, Ubom and Ubom (2014), and other researchers noted the continuous decline in the operations of the Primary mortgage institutions (PMIs) who are saddled with the responsibility of National Housing Fund (NHF) loan disbursement through the NHF unit of the Federal Mortgage Bank of Nigeria. For instance, authors observed that out of a total of 350

PMIs established at inception, only 80 were in active operation as at 2014. This number further reduced to 58 as at 2015 Nubi, (2015), while Popoola and Alamu (2016), reported a total number of PMIs in operation across the country to be 35. Nubi (2015), further reported that out of the 58, 70% of them are clustered in 3 cites out of the 26 cities of the country (Port-Harcourt, Abuja and Lagos), where majority of public servants cannot access nor recover their savings (Oni-Jimoh and Liyanage, 2018).

Also, Ayotamuno and Obinna (2014) reported 73, 676 as the total beneficiaries of the NHF, the authors adduced the low number of participations to lack of awareness of the scheme vis-à-vis locational problems. It was also reported by the same author in 2018 that a cumulative amount of N106,245,530,027.95 (USD 268,069,746.05) was collected since its inception through the contributions of 3,772,031 contributors while a total amount of N100, 488,616,388.00 (USD 253,544,387.88) was disbursed to only 73, 676 members, despite the total number of loan applicant been 3,394827.9 (over 90% of its contributors) (Atamewan et al., 2017). Part of the reason for the low level of contributors across the country is due to the lack of awareness of the scheme and lack of basic understanding by the workers. Contrarily, Adetiloye (2013), noted the performance of other loan sources such as commercial banks, corporative societies and so on to be more significant, even though their interest rate charges on private housing developments are unfavourable and unfit for housing transaction (Atilola and Nubi 2010; Nubi 2015; Okafor 2016). The Bureaucracy in land and related titles transactions has also been a hindrance due to several reasons (Akeju, 2007; Udechukwu, 2008; Nwuba et al., 2015; Adetiloye et al., 2016). Hence, authors reported this as a major obstacle in accessing the NHF loan, as a legally certified, valid/ undisputed collateral is a key requirement to obtaining housing loan (Adeboye et al., 2014; Adoga et al., 2014).

With the greatest mystifying issue challenging Nigerian employees in this current situation, the issue of salary/minimum wage also tremendously affected public servants' homeownership while some other demographic factors could be influencing their capacity of purchasing a house in the open market. Onyike (2007), noted that the concern for the public servants' homeownership is closely connected with problem of land acquisition, high cost of building materials, low salary, mortgage rate of interest,

inadequately established mortgage loan scheme and inaccessibility to loan, managerial hold-ups, high cost construction approval plans, inability to obtain certificate of occupancy on land (C of O), high cost in professional charges, problem associated with environmental, social and physical features, statutory administration, infrastructural development and control through government housing agencies. All this however depend on the availability and accessibility to mortgage finance. Other aspects affecting housing finance include shortage of infrastructure facilities, statutory administration and prohibition on importation of cement, being a major raw material in the housing development among others (Bello, 2007).

1.3 Research Gap

The proceeding discussion have established that several issues affect housing in Nigeria particularly with regards to housing finance. It has been perceived that enhanced housing mortgages can potentially reduce Nigeria housing problem; however, a few empirical works have specifically studied the factors affecting the housing loan accessibility from the NHF scheme and the role of this factor in public servants' home ownership in Nigeria. For instance, Adedeji and Olotuah (2012) and Jalaso et al., (2012), assessed the low income group's accessibility to housing finance; Kama, et al., (2013), examines housing finance policies and their performance; Ogbenjuwa, et al., (2018), compares residential loan between countries towards the understanding of the under-performance factors that can influence policy changes for a sustainable real estate in Nigeria. Past researchers (Adetokunboh et al., (2013), Daniel et al., (2013), and Aliyu et al., (2015), reviewed literatures on the perception of Real Estate Developer's with the reflection of conventional borrowing of residential loans within a state (Bauchi); Nwankwo et al., (2018), observed the sustainable Housing finance sub-sector as a panacea for the social and economic benefits of the country; Ubom and Ubom (2014) and Akinjare et al., (2016), assessed the role of PMIs in housing delivery; Atamewan et al., (2017), made an assessment of the availability and accessibility to mortgages towards a sustainable housing delivery; Iwedi and Onuegbu (2014), examined the effect and challenges attached to housing deficit finance; the available housing finance options through National Housing Policy

framework was observed by Amao and Odunjo (2014); mortgage institutions' impact in property development was analysed by Ezimuo (2014), Johnson (2014) and Nubi (2015), examined the structures of land administration, affordable housing finance and affordable infrastructures; Ibimilua and Ibitoye (2015), observed housing Policy and its impact in delivering sustainable housing across the country; the housing finance market and economic growth in west Africa region to include Nigeria was assessed by Nkechi *et al.*, (2018) and Oyedokun, (2013), analysed the quality of social economic attributes of borrower in relation to loan defaults; while Adepoju and Olatoye (2015), assessed housing finance options and its influence in civil servant's house ownership within Ibadan metropolis. Alabi (2017), assessed NHF operation through a qualitative method, while the exploration of the Real Estate Investment Trust (REIT) as an option for housing finance was considered by (Afolayan, 2017). Noteworthy is that the outcome of their findings is mixed up in most instances which then offer nonspecific result.

Moreover, where NHF performance has been studied it is mostly in association with the general public and low-income groups. For instance, Adetiloye (2013), observed the impact of NHF and government agencies on the country's capital formation in relation to housing schemes; the non-participation of citizens into NHF scheme was assessed by Ayotamuno and Obinna (2014). Possibly there is clearly a limited research from literatures on the different beneficiaries that plays dominant roles in the NHF scheme such as the developer and individual household/public servants, although some factors are likely to be applicable to all stakeholders. However, none has focused on the contribution of NHF to private developers and public servant's housing development, and loan procurement across the country over the years and until now. Worthy of note is that most of the studies are qualitative in nature, with variations in the modern-day models. Hence this appears to have slightly addressed the challenges often faced by this group in terms of examining individual stakeholders' opinion, being a major contributor to the scheme. A major limitation of such studies is the lack of disaggregation of the hidden variables stimulating the identified issues been itemized in the questions on the construct or variables attached in appendix (B). Such qualitative study has little or no contribution in revealing the concealed variable to the entire factors.

This study advances the earlier reported studies through the application of structural equation model/partial least square (SEM/PLS) in measuring the recognized factors affecting housing finance loan accessibility. Although the statistical method can be complex to understand in terms of analysis and interpretation, however, PLS-SEM provides a clear results of analysis that supersedes earlier studies and can better explain the issues affecting housing mortgages (Cepeda-Carrion *et al.*, 2019_and Hair *et al.*, 2019).

1.4 Research Questions

With reference to the above authors' studies on housing and housing finance in Nigeria, several factors were identified to affect housing finance with little correlation. This makes it uneasy to identify the most contributing factor to the National Housing Fund scheme's ineffectiveness. The foregoing then raises five related questions which are considered essential for the research process and supporting of required data for the study. It helps to effectively understand the factors affecting NHF scheme while providing a pathway through the research and writings to support a good outcome.

Research Questions are Listed Below

- 1. What are the constraints to public servants National Housing Fund accessibility in Nigeria?
- 2. What is the perception of public servant and professionals on National Housing Fund accessibility?
- 3. What Model can be established for National Housing Fund accessibility in Nigeria?
- 4. What is the appropriate and valid model that can be developed for effective National Housing fund in Nigeria

1.5 Research Aim and Objectives

This research is aimed at developing a model for effective NHF accessibility in Nigeria towards a successful housing development and ownership by the public servants. The model will describe how operative housing finance transactions can be implemented in the country with major attributed been identified. Based on the existing literature on NHF scheme as a source of housing delivery and ownership in Nigeria, the following objectives were set towards the achievement of the research work:

- 1. To identify the constraints affecting the National Housing Fund accessibility of Public Servant in Nigeria and the perception of the Public Servant and Experts on such constraints.
- 2. To develop a Model and an Action Plan for effective National Housing Fund accessibility in Nigeria through identified indicators.
- 3. To validate the implementation model for effective National Housing Fund in Nigeria.

1.6 Scope of Study

The major emphasis in this study is on the constraints attached to public workers housing finance accessibility through the NHF scheme. The housing finance situation within the South western part of Nigeria being one of the six geopolitical zones of the country was studied. The zones have six states which is politically and characteristically divided into three sections: Lagos and Ogun, Oyo and Osun, and Ondo and Ekiti. Currently, seven Federal universities, five Federal Polytechnics and four Federal Colleges of Education exist within the region. The scope was limited to the federal institution workers within three states; Lagos, Ondo, and Oyo, while the

study was confined to factors related to housing finance accessibility through the government-initiated scheme (NHF).

The justification for the choice of these three urban areas and institutions is due to the states' position, population, years of higher institution's existence in the states, political and socio-economic development. For instance, the country's industrialization started in the region and the oldest city and institution of the country exists there. It accommodates the largest urbanized and commercialized city of the country. Also, the choice of federal institution is due to their regular flow of income and a significant impact in the country's educational system. The public servants who are contributors to the NHF scheme were study in respect to their housing loan accessibility process and its impact on their household as well as private developers' operation with the region.

It is presumed that any response from the area and the group studied will reflects the likely replies of people in other area of the country. It is believed that the study can be relevant to other regions of the country owning to the fact that NHF scheme and its principle is generally applicable to all public servants across the country. It is then anticipated that a wide application can be ascribe to the study beyond the scope of this work if necessary, to other regions across the country.

1.7 Significance of Study

The home ownership rate in Nigeria appears below that of other countries of the world. According to Chukwu (2014), this stands at 25 percent compare to countries like Singapore, Kenya, United States of America, Republic of Benin, South Africa, and Libya who has about 90, 73, 70, 63, 56, and 41 percent homeownership rate respectively. In the entire country and especially the southwest zone it is noticeable that the large numbers of houses constructed through the government and real estate developers can only be acquired by the high-income earners mostly within the private sector. It serves to re-iterate that such houses are beyond the affordability of many public servants, as they are only left with the option of spending their limited incomes

on incremental building. Hence, the outcomes of this are the development of illegal construction with no appropriate settings, slum and shanties houses, overcrowded houses with no security measures.

With addition to the qualitative approaches adopted by different scholars in assessing the housing situation in the country, this triangulation study on housing finance situation in the country seems essential in facilitating an improved mortgage transaction towards public servant house ownership. It will enrich the empirical studies on the appropriate approach to housing finance scheme while providing some highlights on over-all lessons that can be useful for regulators and Policy makers. The academic and industry-based research's interest on effective housing finance indicators and attributes could also be redirected through the basic empirical evidence while serving as a benchmark for future operation. It will showcase the aspect of housing finance scheme where improvement is required and offer strategy that can be used to stimulate housing finance accessibility.

More so, it will fill in an existing gap in housing and housing finance literature while providing feedback on effective housing finance status in Nigeria. This will help proposed housing developers to realize their prospect of home ownership through the scheme's loan accessibility as well as government's desire towards home ownership in the country.

1.8 Brief Research Methodology

This section contains an overview of the study's method such as the: procedure and planning of the research, data gathering and analysis method with its statistical tool and result's report. It interpolates the study's objectives that was generated through the identified issues in problem statement and research questions and relates with the data analysis tool (Approaches and variables) and discoveries. Quantitative survey-based method was majorly use for the pilot and final survey from the public servants with a partial qualitative method (Interview and FGD) on the private housing developers, housing related Surveyors and mortgages institution's respondents. The

latter help to enrich the information required for the study. The face to face questionnaire administration with field assistance was considered as an appropriate tool for the study. Worthy to say that the method is efficient, fast to administer to the large targeted public servants, and less expensive, (Sekaran, 2000 and Zikmund, 2003). Five-point Likert Scale questionnaire was designed ranging from one to five. A pretest study was carried out prior to the main study to ensure the clarity of the questions as well as to know certify that it is free of any unforeseen ambiguity.

The study's population consisted of public servants (mostly household heads), Real Estate Developers, mortgage institutions and housing related professionals within a purposively selected locations in south-west Nigeria (Lagos state, Oyo State and Ondo State). This was in a view to seek their opinion on ENHF indictors and attributes as a point to strategically improve homeownership in the country. The face to face self-administered questionnaire with field assistance was conducted through stratified random sampling from July 2017 to November 2017 in each of the selected areas. With the use of this process, 365 questionnaires were administered. This was purposed to create empirical results and solutions towards the research questions, objectives and hypothesis testing. Therefore, collected data were analysed through descriptive analysis, SMART PLS Structural Equation Model (PLS-SEM) version 2.0; statistical Package for Social Sciences (SPSS) version 22.0 and NVivo version 12.

Quantitative data analysis was done in two segments. Stage one involves the descriptive statistics of respondents' characteristics through SPSS version 22.0 while the second stage involves the attributes and indicators of ENHF preliminary data analysis through SPSS and the determination of ENHF measurement model ENHF structural model through PLS-SEM version 2.0. The figure below indicates the overview of the research methodology. Summarily the entire method use for the study is discussed in the thesis's chapter three.

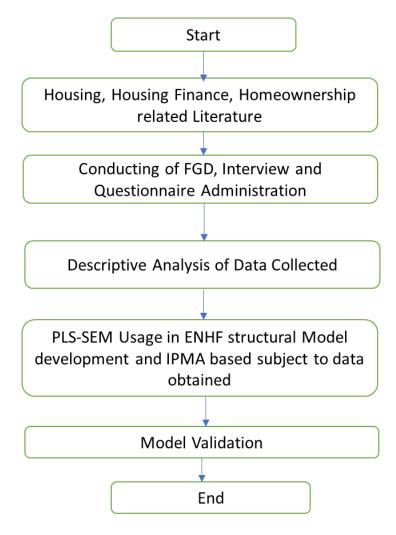


Figure 1.1 Flowchart of the Research Method in View

The study topic is re-worked in relation with the study's objectives questions, research instrument and applicable analytical tool to show the existing linkage between them. This helps to set a boundary for the study and establish the data collection and analysis method (Corbin and Strauss, 2008).

1.9 Thesis Organizational Structure

The thesis comprised of six chapters and arranged as follows:

Chapter One of the study centres on the research background, the motivation behind the study and the problem statement. The research aims and objective in relation with research questions were outlined, the research scope, significance and brief methodology were also discussed.

Chapter Two of the study entails an extensive literature search on housing, housing finance, homeownership; housing finance theories, some attempts by government towards housing delivery, several approaches to housing finance were discussed. The chapter also discussed strategies adopted in various countries of the world in tackling housing deficits, while the conceptual framework was also presented

Chapter Three of the study was cantered on research methodology. The study design process was discussed. This includes the research approach, sampling design and process, data collection and analysis methods. The study area and the rational for choosing the cities were discussed. The instrument used and validity based on exploratory factor analysis and construct validity subject to confirmatory factor analysis was also highlighted.

Chapter Four detailed the reports of the data analysis process, this consists of the field survey results of the quantitative and qualitative survey.

Chapter Five: This chapter present the discussion on the basis of a well-structured administered questionnaires and interview protocol. The problem of study, objectives and research questions however underpin the generated data. Further, the model for effective National Housing Fund is equally presented here. Subsequently, the chapter present the development and validation process of the proposed model.

Chapter Six: The reassessment of the research questions and the objectives was done in this chapter. More so, the conclusions and recommendations are drawn from the whole study and future areas for research are presented.

1.10 Chapter Summary

This chapter gave an introduction and overview of the study, it provided a background narration on housing and its finance issues emphatically on Africa and Nigerian situation, with gap identification. The research question, aim and objectives were set in relation with the gap, the research scope, limitations, significance and brief methodology were also stated as well as the organization of the thesis.

REFERENCES

- Adeboye, A., Rod, G., Felix, H., and Olomolaiye, P. (2014). "An overview of residential real estate financing in Nigeria." *Journal of Real Estate Literature* 20(2): 263-288.
- Adebowale, S. A., Morakinyo, O. M., and Ana, G. R. (2017). Housing materials as predictors of underfive mortality in Nigeria: evidence from 2013 demographic and health survey. *BMC paediatrics*, 17(1), 30.
- Adedeji, Y. M. D., and Olotuah. A. O. (2012). "An Evaluation of Accessibility of Low-Income Earners to Housing Finance in Nigeria" *European Scientific Journal* 8(12).
- Adedokun, O. A., Akinradewo, F. O., Adegoke, J. O., and Abiola-Falemu, J. O. (2012). Evaluation of the contribution of national housing fund scheme towards housing delivery in Nigeria. *Journal of Building Performance*, 3(1).
- Adedokun, O. A. (2006). An appraisal of the performance of National Housing Fund Scheme in Housing delivery in Nigeria. *Department of Quantity Surveying_Akure, Federal University of Technology Postgraduate Diploma*.
- Adekunle, A. K. (2013). "The National Housing Fund, Mortgage Finance and Capital Formation in Nigeria." *International Journal of Business and Social Research* 3(7): 43-53.
- Adeleye, A., and Adegoke O. J. (2007). "The Effect of Past Policies on Mortgage Finance in Nigeria" Journal of the Nigerian Institution of Estate Surveyor and Valuers 30(1).
- Ademiluyi, I. A., and Raji (2008). "Public Housing Delivery Strategies in Nigeria: A Historical Perspective of Policies and Programmes." *Journal of sustainable development in African* 12(6): 153-160.
- Ade-Ojo, O. C., & Ogunsemi, D. R. (2019). Cost Prediction for Green Affordable Housing in Nigeria. *Greening Affordable Housing: An Interactive Approach*, 265.
- Adetokunbo, O; Aibinu I., and Agbato, S. (2013) Corporate Real Estate Development in Nigeria: Issues and Challenges of Site Acquisitio.n *IRS/BS Foundation for Africa Real Estate Research*
- Adetiloye, K. A., & Eke, P. O. (2016). Financial Architecture, Real Estate Market and Economic Development in Sub-Saharan African Countries: Evidence from Nigeria. *Journal of South African Business Research*, 1-16.
- Adetiloye, K. A. (2013). The national housing fund, mortgage finance and capital formation in Nigeria. *International Journal of Business and Social Research*, 1-14.
- Adeyeni, G. O., Olayiwola, L. M., and Oladehinde G. J. (2016). "Challenges to incremental housing development in Ibadan Municipality, Nigeria." *Asian Research Journal of Arts and Social Science* 1(4): 1-10.
- Adrian, T. and Liang, N. (2016). "Monetary policy, financial conditions, and financial stability."
- Aduwo, E.B., Edewor P.A., and Ibem E.O. (2016). Urbanization and Housing for Low-Income Earners in Nigeria: A Review of Features, Challenges and Prospects. *Mediterranean Journal of Social Sciences*. 17 (3)S1, 347-357

- Afolayan, A. S. (2017). Exploring Real Estate Investment Trust (REIT) as a housing finance option in Nigeria. *Ethiopian Journal of Environmental Studies and Management*, 10(1), 1-10.
- Agbada, A. O. and Sunny E.-E. (2015). "Empirical Analysis of Primary Mortgage Institutions Fundamentals and Gross Domestic Product Increase in Nigeria." *Applied Finance and Accounting* 2(1): 89-100.
- Agbola, S. B. (2005). The housing debacle.
- Agbola, T., and Olatubara, C. O. (1989). Housing subsidy, mortgage, default and housing project replicability in Nigeria: a case study of the public housing delivery system. *African Urban Quarterly*, 4(1-2), 90-96.
- Agbola, T. (1987). Institutional constraints on housing development: The urban areas of Nigeria: The land-use decree and the building plan approval process. *Habitat International*, 11(2), 113-120
- Agunbiade, M. E., Rajabifard, A., and Bennett, R. (2014). Land administration for housing production: analysis of need for interagency integration. *Survey review*, 46(334), 66-75.
- Agunbiade, M., Rajabifard, A., and Bennett, R. (2013). Modes of housing production in developing countries: the contemporary role of land, labour, and capital in Lagos, Nigeria. *Journal of Housing and the Built Environment*. 28(2), 363-379.
- Ahmed, Y., and Sipan, I. (2019). Public Private Partnership as a Determinant Factors of Affordable Housing in Abuja Nigeria. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*.
- Aigbokhan, B. E. and Ola, K. O. (2019). Foreign Land Acquisitions: Household Livelihood With Some Evidence on Nigeria. Socio-Economic Development: Concepts, Methodologies, Tools, and Applications, *IGI Global*: 1159-1178.
- Ajani, O. A., and Oyekola, I. A. (2019). Reasons for Public Sector Jobs Preference in Nigeria. *African Research Review*, 13(1), 114-130.
- Ajanlekoko, J. S. (2001). Sustainable housing development in Nigeria-The financial and infrastructural implication. *Proceedings of the international conference on spatial information for sustainable development in Nairobi, Kenya*. 2nd -5th October, Nairobi, Kenya.
- Ajayi, O., Ajayi, O., Akinsiku, O., and Osunsanmi, T. (2016). Strategies for housing affordability in Nigeria. *Journal of construction project management and innovation*, 6(Supplement 1), 1620-1632.
- Ajibola, M., Oluwunmi, A. O., and Egun, O. (2012). "Examining the Factors Contributing to Affordable Housing in Kosofe Local Government Council Area, Laogs, Nigeria." *Journal of Asian Business Strategy* 2(10): 206-218.
- Ajibola, M., and Oni, A. (2009). "Real estate investment trust: An attractive investment vehicle for real estate development in Nigeria." *Journal of the Nigerian institution of Estate Surveyors and Valuers* 32(1): 60-66.
- Akeju, A. A. (2007). Challenges to providing affordable housing in Nigeria. *Proceedings of 2nd Emerging Urban Africa International Conference on Housing Finance in Nigeria*. 17th -19th October, Abuja, Nigeria.

- Akinbola, K., and Md. Yassin, A. (2016). Assessing the Effects of Stand-Alone Structuration of Land Administration System on Urban Land Delivery and Accessibility in Nigeria. *Traektoriâ Nauki*, 2(12), 10-1.
- Akinbogun, S., Aigbavboa, C., and Gumbo, T. (2019). Searching for Property Right for the Homeless in a Mega City–Will House Sharing in a Social Housing Work?. In *Real Corp 2019–Is This The Real World? Perfect Smart Cities vs. Real Emotional Cities. Proceedings of 24th International Conference on Urban Planning, Regional Development and Information Society* (pp. 605-603). CORP–Compentence Center of Urban and Regional Planning.
- Akingbade, A. O. (2005). Improvement of Availability of Land Registration and Cadastral Information in Ondo State, Nigeria. ITC.
- Akinjare, V. A., Adetiloye, K. A., Isibor, A. A., and Okafor, T. C. (2016). The Assessment of the Contribution of Primary Mortage Institutions to Housing Finance in Nigeria: A Case Study of Union Homes Savings and Loans PLC. *Asian Journal of Information Technology*, *15*(13), 2094-2100.
- Akinlabi, A. J. (2015). "Informal financial institutions and sustainable housing finance in southwestern Nigeria." *The Business & Management Review* 7(1): 95.
- Akinleye S. O. (2007): Characteristics and determinants of household food demand in Nigeria.

 Unpublished PhD Thesis, Department of Agricultural Economics, University of Ibadan
- Akinmoladun, O. I., and Oluwoye, J. (2007). An assessment of why the problems of housing shortages persist in developing countries: A case of study of Lagos metropolis, Nigeria. *Pakistan Journal of Social Science*. 4(4), 589-598.
- Akinwunmi, A. (2009). "An investigation into factors affecting housing finance supply in emerging economies: A case study of Nigeria."
- Akinwunmi, A., Gameson, R., Hammond, F., and Olomolaiye, P. (2007, September). Mortgage Insurance and Housing Finance in Emerging Economies. In *Proceedings of 23rd ARCOM Conference*. University of Ulster, Belfast, UK Association of Researchers in Construction Management (pp. 243-52).
- Akinyemi, A. B., Afolayan, J. O., and Oluwatobi, E. O. (2016). Some properties of composite corn cob and sawdust particle boards. *Construction and building materials*, 127, 436-441.
- Akinyode, B. F., and Khan, T. H. (2016). Influence of estate agents and building plan approval cost on housing affordability in developing cities. *Scottish Journal of Arts, Social Sciences and Scientific Studies*. 143.
- Akinyode, B. F., Khan, T. H., and Ahman, A. S. (2015). Consumer decision making process model for housing demand. *Jurnal Teknologi*, 77(14), 59-69.
- Alabi, M., Raheem, W. M., and Bako, A. I. (2018). A Review of National Policies, Programmes and Initiatives on Sustainable Urban Development in Nigeria. *KIU Journal of Social Sciences*, 4(1), 7-19.
- Alamu, O. I. (2012). Effect of National Housing Policy Thrust on Service Delivery in The Federal Capital Territory, Abuja, Nigeria: An Empirical Perspective.
- Allen, M. J., and Yen, W. M. (1979). Introduction to measurement theory. Monterey, CA: Brooks.

- Aliu, I. R., Towry-Coker, L., and Odumosu, T. (2018). Housing policy debacle in Sub-Saharan Africa: an appraisal of three housing programs in Lagos Nigeria. *African Geographical Review*, 37(3), 241-256.
- Aliyu, B. A., Sani, H., Usman, H., and Muhammad, H. (2018). Ranking the Causative Factors of Mortgage Valuation Inaccuracy in Kaduna Metroplois. *Real Estate Management and Valuation*, 26(3), 71-81.
- Aliyu, A. A., Usman, H., and Alhaji, M. U. (2015). Real estate developers' perception on conventional borrowing in financing residential developments: A review of emerging literature. *International Journal of Economics and Finance*, 7(7), 240-253.
- Alufohai, A. J. (2013). The Lagos state 2010 mortgage law and the supply of housing. In *FIG Working Week*.
- Aluko, B. T. and Amidu, A. (2006). Urban Low-Income settlements, Land Deregulation and Sustainable Development in Nigeria- Promoting Land Administration and good Governance FIG Regional Conference Accra, Ghana, FIG. 5.
- Aluko, B. T. (2002): Urban Housing for Low-Income Earners in the City of Lagos State. The Land Question: Proceedings of National Conference On the City in Nigeria. By Faculty of Environmental Designs and Management, Obafemi Awolowo University, Ile Ife. PP288-294.
- Amao, F. L., and Odunjo, O. O. (2014). Housing Finance in Nigeria. *Journal of Economics and Sustainable Development*, 5(27), 101-104.
- Ameyaw, E. E. (2014) 'Risk Allocation Model for Public-Private Partnership Water Supply Projects in Ghana', Doctoral Thesis, Hong Kong Polytechnic Univ, Hong Kong
- Anderson, R. C., Duru, A., and Reeb, D. M. (2009). Founders, heirs, and corporate opacity in the United States. *Journal of Financial economics*, 92(2), 205-222.
- Ankeli, I. A., Dabara, I. D., Omotehinshe, O. J., Adamu, M. K., and Adaranijo, L. O. (2017, September).
 Assessment of Housing Condition and its Effect on Occupiers' Health Condition. In *The 12th International Conference on Advances in Science, Humanities and Education, 12th–13th September* (pp. 57-64).
- Anidiobu, G. A., Okolie, P. I., and Ugwuanyi, W. N. (2018). Effect of Mortgage Finance on Housing Delivery in Nigeria: The Primary Mortgage Institution (Pmi) Perspective. *Journal on Banking Financial Services & Insurance Research*, 8(2).
- Anyanwu, J. C. (1991). Housing finance in Nigeria: the role of domestic financial institutions. *African Review of Money Finance and Banking*, 129-145.
- Aribigbola, A. (2011). Housing affordability as a factor in the creation of sustainable environment in developing world: the example of Akure, Nigeria. *Journal of Human Ecology*, 35(2), 121-131.
- Aribigbola, A. (2008). "Housing Polciy Formulation in Developing Countries: Evidence of Programme Implimentation fro Akure, Ondo State, Nigeria." Journal of Human Ecology 23(2).
- Aderibigbe, B., Sadiku, E., Jayaramudu, J., and Sinha Ray, S. (2015). Controlled dual release study of curcumin and a 4-aminoquinoline analog from gum acacia containing hydrogels. *Journal of Applied Polymer Science*, 132(10).

- Aribigbola, A. (2005). "study of Urban Housing choice in Akure, ondo State, Nigeria." Unpublished Ph. D. Thesis, Department of urban and Required Planning, Obafemi Awolowo University, Ile-ife.
- Association, A. B. (2017). Mortgage Lending Rules, Sensible Reforms for Banks and Consumers A. B. Association. America.
- Artle, R., and Varaya, P. (1978). 'Life cycle consumption and homeownership', *Journal of Economic Theory*, **18**(1), pp. 38–58
- Asabere, N. Y., Xia, F., Wang, W., Rodrigues, J. J., Basso, F., and Ma, J. (2014). Improving smart conference participation through socially aware recommendation. *IEEE Transactions on Human-Machine Systems*, 44(5), 689-700.
- Atamewan, E. E., Eyo, E. E., and Efanga, M. E. (2017). Appraisal of Availability and Accessibility to Mortgage Finance for Sustainable Housing Delivery in Nigeria. *European Scientific Journal*, 13(31).
- Atilola, M. I. and Nubi, T. O. (2010). "A study of the Nigerian Bank Re-capitalization Policy: Implications for Real Estate Financing.." Journal of Environmental Technology 2(1): 63-75.
- Ayedun, C. and Oluwatobi, A. (2011). "Issues and challenges militating against the sustainability of affordable housing provision in Nigeria." *Business Management Dynamics* 1(4): 1-8.
- Ayodele, O. S., Obafemi, F. N., and Akongwale, S. (2013). Policy Options for Low and Sustainable Lending Rates in Nigeria. *Mediterranean Journal of Social Sciences*, 4(3), 147.
- Ayotamuno, A. and Obinna V. C. (2014). "Housing in Nigeria: An Evaluation of Contribution of Nigerians to the National Housing Fund (NHF)." *International Journal Of Scientific Research And Education* 2(12): 2518-2531.
- Baba, A. N., Achoba, M. I., and Otaro, O. T. (2015). Evaluating the Prospects and Challenges of Sustainable Housing on National Development in Nigeria. *world*, 9, 10.
- Badev, A., Beck, T., Vado, L., and Walley, S. (2014). *Housing finance across countries: new data and analysis*. The World Bank.
- Bah, E. H., Faye, I., and Geh, Z. F. (2018). *Housing market dynamics in Africa*. London: Palgrave Macmillan..
- Baker, A., Audit, B., Yang, S. H., Bechhoefer, J., and Arneodo, A. (2012). Inferring where and when replication initiates from genome-wide replication timing data. *Physical review letters*, 108(26), 268101.
- Bana, P. (1991). "Housing the urban poor in Nigeria." *The Nigerian Institute of Architects Journal* 6(1): 22-25.
- Bandara, K. P. S. (2006). Assessing irrigation performance by using remote sensing.
- Bandyopadhyay, A. and A. Saha (2011). "Distinctive demand and risk characteristics of residential housing loan market in India." *Journal of Economic Studies* 38(6): 703-724.

- Barajas, M. A., Beck, T., Dabla-Norris, M. E., and Yousefi, M. R. (2013). *Too cold, too hot, or just right? Assessing financial sector development across the globe* (No. 13-81). International Monetary Fund.
- Barlett, J. E., Kotrlik, J. W., and Higgins, C. C. (2001). Organizational research: Determing appropriate sample size in survey research. *Information technology, learning and performance journal*, 19(1), 43-50.
- Barth, J. R., Cordes, J. J., and Yezer, A. M. (1979). Financial institution regulations, redlining and mortgage markets. *The regulation of financial institutions*, 21, 101-143.
- Basorun, J. and Fadairo G. (2012). "Government challenges in housing the urban poor in Ado-Ekiti, Nigeria." *Journal of sustainable society* 1(2): 31-35.
- Besley, T., and Persson, T. (2011). *Pillars of prosperity: The political economics of development clusters*. Princeton University Press. .
- Besley, T. and Levenson, A. R. (1996). "The role of informal finance in household capital accumulation: evidence from Taiwan." *The Economic Journal*: 39-59.
- Beiske, B. (2002). Research Methids. Uses and Limitations of questionnaires, interviews and case studies. Manchester School of Management. Available on http://www.grin.com/document/15458.
- Belahya, H., Boubekri, A., and Kriker, A. (2017). A Fast Evaluation Method for Energy Building Consumption Based on the Design of Experiments. In *IOP Conference Series: Earth and Environmental Science* (Vol. 83, No. 1, p. 012025). IOP Publishing.
- Bello, A. (2019). "Review of the Housing Policies and Programmes in Nigeria." *International Journal of Contemporary Research and Review* 10(02): 20603-20616.
- Bello, M. O. (2007). Accessibility of land as a tool for empowering the low-income earner of the informal sector in Nigeria. *FIG Working Week, Hong Kong, May*, 13-17. *Hong Kong*
- Bello, A., (2002). Housing Finance Mechanisms in Ogbomoso Urban Fringe. Unpublished B. Tech. Ladoke Akintola University of Technology Ogbomosho.
- Ben, P., (2014). Housing Finance: The case study of Nigeria. MSc. Nottingham Trent University.
- Benedict, E. T. (2019). "Bribery and Corruption in Africa: Nigeria As a Case Study." Available at SSRN 3391672.
- Bernanke, B. S. (2010). Monetary Policy and the Housing Bubbles Annual Meeting of the American Economic Association. Atlanta, Georgia.
- Bernheim, B. D. and Meer, J. (2013). "Do real estate brokers add value when listing services are unbundled?" *Economic Inquiry* 51(2): 1166-1182.
- Bhutta, N., Fuster, A., and Hizmo, A. (2019). Paying too much? Price dispersion in the US mortgage market. *Price Dispersion in the US Mortgage Market (July 19, 2019)*.
- Birner, R., and Okumo, A. (2012). Challenges of land governance in Nigeria: insights from a case study in Ondo State. *International Food Policy Research Institute*.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17(3), 303-316.

- Bollen, K., and Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological bulletin*, *110*(2), 305.
- Boleat, M. and Walley, S. (2008). Nigeria financial system strategy 2020. Housing finance initiative: World Bank publication.
- Brace, I. (2018). Questionnaire design: How to plan, structure and write survey material for effective market research, Kogan Page Publishers.
- Bradburn, N.M., Sudman, S., and Wansink, B. (2004). Asking questions: the definitive guide to questionnaire design--for market research, political polls and social and health questionnaires. San Francisco, USA: John Wiley & Son, Inc.
- Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Braun, V., and Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. sage.
- Brevoort, K., P and Wolken, J. D. (2008). Does Distnace Matter in Banking? . Financial and Economic Discussion Series Washinton, D.C., Division of Research & Statistics and Monetary Affairs, Federal Reserve Board.
- Brueckner, J. K., and Lall, S. V. (2015). Cities in developing countries: fueled by rural—urban migration, lacking in tenure security, and short of affordable housing. In *Handbook of regional and urban economics* (Vol. 5, pp. 1399-1455). Elsevier.
- Brueckner, J. K. (1997). Consumption and investment motives and the portfolio choices of homeowners. *The Journal of Real Estate Finance and Economics*, *15*(2), 159-180.
- Bryman, A. (2015). Social Research Methods (5th Ed.). Oxford University Press.
- Bryman, A. (2012). Social Research Methods (4th Ed.): Oxford University press.
- Bryman, A., and Bell, E. (2011). Ethics in Business Research (Chapter 5). Business Research Methods.

 Oxford University Press.
- Bryne, B. M., (2001). Structural Equation Modelling with Amos: Basic Concepts, Application, and Programming. Mahwah, NJ:Erlbaum.
- Bryman, A. (2008). Social Research Methods. (3rd. Ed.). Oxford: Oxford University Press.
- Buchanan, B. G. (2017). Beyond Mortgage-Backed Securities. In *Securitization and the Global Economy* (pp. 77-110). Palgrave Macmillan, New York.
- Buckley, R. M. and Kalarickal, J. (2005). "Housing policy in developing countries: Conjectures and refutations." The World Bank Research Observer 20(2): 233-257.
- Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International journal of testing*, 1(1), 55-86.
- Calomiris, C. W. (2017). "Reforming Financial Regulation after Dodd-Frank." Manhattan Institute for Policy Research, New York.
- Campbell, J. Y. and Cocco J. F. (2015). "A model of mortgage default." The Journal of Finance 70(4): 1495-1554.
- Campbell, J. Y. (2013). Mortgage market design. Review of finance, 17(1), 1-33.
- Campbell, J. (2012). Nigeria's battle for stability. The National Interest. (118), 31-39.

- Campbell, R., Devos, E., Maxam, C., and Spieler, A. (2008). Investment, liquidity, and private debt: The case of REIT credit facilities. *Journal of Real Estate Portfolio Management*, 14(3), 195-202.
- Canepa, A. and Khaled, F. (2018). "Housing, Housing Finance and Credit Risk." *International Journal of Financial Studies* 6(50).
- Centre for Affordable Housing in Africa-CAHA (2015). A review of some of Africa's housing finance markets, Published by the Centre for Affordable Housing Finance in Africa. 183.
- Cepeda-Carrion, G., Cegarra-Navarro, J. G., and Cillo, V. (2019). "Tips to use partial least squares structural equation modelling (PLS-SEM) in knowledge management." *Journal of Knowledge Management* 23(1): 67-89.
- Cerutti, E. (2015). "Drivers of cross-border banking exposures during the crisis." *Journal of Banking & Finance* 55: 340-357.
- Cerutti, E., Claessens, S., and Laeven, L. (2017). The use and effectiveness of macroprudential policies: New evidence. *Journal of Financial Stability*, 28, 203-224.
- Cetorelli, N., and Goldberg, L. S. (2012). Banking globalization and monetary transmission. *The Journal of Finance*, 67(5), 1811-1843.
- Chan, Y. Y., Lee, W. J., Leong, J. E., Liow, K. F., and Thum, P. S. (2017). *Customer Perceptions on Housing Loan: Evidence from Urban Area in Malaysia* (Doctoral dissertation, UTAR).
- Chin, W. W. (1998). The Partial Least Squares Approach to Structual Equation Modelling. Modern methods for business research, 295(2), 295-336.
- Chukwu, L. (2014). Addressing housing deficit in Nigeria, *News Agency of Nigeria (NAN)* January 16, by PM News
- Chukwujekwu, I. E. (2006). "Facilitating low cost housing scheme: Which way forward in housing today " Journal of the association of Housing Corporation of Nigeria (AHCN)ISSN) 1(10).
- Cohen, L., Manion, L., and Morrison, K. (2013). Research methods in education. routledge.
- Coletti, D., Gosselin, M. A., and MacDonald, C. (2016). the Rise of mortgage Finance Companies in Canada: benefits and Vulnerabilities. *Financial System Review*, 39-52.
- Collier, P. and Venables, A. J. (2014). "Housing and urbanization in Africa: Unleashing a formal market process."
- Collis, J., and Hussey, R. (2013). *Business research: A practical guide for undergraduate and postgraduate students*. Macmillan International Higher Education.
- Collins, J. M. and Schmeiser, M. D. (2013). "The effects of foreclosure counseling for distressed homeowners." Journal of Policy Analysis and Management 32(1): 83-106.
- Connelly, L. M. (2008). Pilot studies. Medsurg Nursing, 17(6), 411.
- Corbin, J., and Strauss, A. (2008). Strategies for qualitative data analysis. *Basics of Qualitative Research. Techniques and procedures for developing grounded theory*, 3.
- Crawford, A., Meh, C., and Zhou, J. (2013). The residential mortgage market in Canada: A primer. *Financial System Review*, *3*(53), 13.
- Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.

- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Boston, MA: Pearson.
- Creswell, J. W. (2009) 'Research Design: Qualitative, Quantitative and Mixed Method Approaches', London: Sage Publications.
- Dalbem, R., da Cunha, E. G., Vicente, R., Figueiredo, A., Oliveira, R., and da Silva, A. C. S. B. (2019). Optimisation of a social housing for south of Brazil: From basic performance standard to passive house concept. *Energy*, *167*, 1278-1296.
- Daniel, M. M. (2014). Evaluating the determinants for access to subsidised mortgage housing in Jos, Nigeria. *Journal of Construction in Developing Countries*, 19(2), 87.
- Daniel, O. O., Ngutor, V., Idemudia, A. B., Adetokunbo, A. R., Cornelius, I. A., and Akinwale, E. A. (2013). "Pediatric maxillofacial injuries at a Nigerian teaching hospital: A three-year review." Nigerian journal of clinical practice 16(2): 149-154.
- David, M,. and Stton, C.D (2011). Social Research: An Introduction. SAGE Publications.
- Davis, J. S. (2015). The macroeconomic effects of debt-and equity-based capital inflows. *Journal of Macroeconomics*, 46, 81-95.
- Davis, M. A., and Van Nieuwerburgh, S. (2015). Housing, finance, and the macroeconomy. In *Handbook of regional and urban economics* (Vol. 5, pp. 753-811). Elsevier.
- DRC (2007). Democratic Republic of the Congo: Poverty reduction strategy paper. Washington, D.C. *International Monetary Fund*.
- Deng, Y. and Fei P. (2008). "The emerging mortgage markets in China." Mortgage Markets Worldwide: 1-33.
- Dermine, J. (2013). Bank corporate governance, beyond the global banking crisis. *Financial Markets, Institutions & Instruments*, 22(5), 259-281.
- De Araujo, D. K. G., Barroso, J. B. R. B., and Gonzalez, R. B. (2019). Loan-to-value policy and housing finance: effects on constrained borrowers. *Journal of Financial Intermediation*, 100830.
- De Soto, H. (2000). The Mystery of Capital: Why Capitalism Succeeded in the West and not in any other Part of the World.
- De Vaus, D. (2013). Surveys in social research (6th ed.). London and New York: Routledge (Taylor & Francis Group).
- Deku, S. Y., and Kara, A. (2017). *Securitization: Past, Present and Future*. Springer International Publishing.
- Diamond, D. and Lea, M., (1992). Housing Finance in Developed Countries: An international comparison of efficiency. Journal of Housing Research: 3(1).
- Dietsch, M., & Petey, J. (2015). The credit-risk implications of home ownership promotion: The effects of public subsidies and adjustable-rate loans. *Journal of Housing Economics*, 28, 103-120.
- DiPasquale, Denise, and William C. Wheaton. (1994). ``Housing Market Dynamics and the Future of Housing Prices," Journal of Urban Economics35(January),1–27.
- DiPasquale, D., and Wheaton, W. C. (1992). The markets for real estate assets and space: A conceptual framework. *Real Estate Economics*, 20(2), 181-198.
- Doreen Andoh/Daily Graphic/Ghana (2014). Ghana has 1.7-million housing unit deficit

- http://graphic.com.gh/news/general-news/18541-ghana-has-1-7- million-housing-unit-deficit.html [Accessed on 17 June, 2017]
- Doling, J., Vandenberg, P., and Tolentino, J. (2013). Housing and Housing Finance-A Review of the Links to Economic Development and Poverty Reduction. *Asian Development Bank Economics Working Paper Series*, (362).
- Early, D. W. (1998). The role of subsidized housing in reducing homelessness: An empirical investigation using micro-data. *Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management*, 17(4), 687-696.
- Easthope, H., van den Nouwelant, R., and Thompson, S. (2020). Apartment ownership around the world: Focusing on credible outcomes rather than ideal systems. *Cities*, 97, 102463.
- Eberl, M. (2010). An Application of PLS in Multi-Group Analysis: The Need for Differentiated Corporate-Level Marketing in the Mobile Communications Industry. In V. Esposito Vinzi, W.W. Chin, J. Henseler, & H. Wang (Eds.), Handbook of partial least squares: Concepts, methods and applications in marketing and related fields, pp. 487-514. Berlin: Springer.
- Ebekozien, A., Abdul-Aziz, A. R., and Jaafar, M. (2019). Low-cost housing policies and squatters struggles in Nigeria: the Nigerian perspective on possible solutions. *International Journal of Construction Management*, 1-11.
- Egolum, C. C., Emoh, F. I., and Onyejiaka, J. C. (2017). Sources of funds available to private investors for housing development in Nigeria. *British Journal of Environmental Sciences*, 5(3), 16-29.
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of management review, 14(4), 532-550.
- Ekemode, B. G., Adegoke, O. J., and Aderibigbe, A. (2017). Factors influencing land title registration practice in Osun State, Nigeria. *International Journal of Law in the Built Environment*.
- Elming, W. and Ermler A. (2016). Housing equity, saving and debt dynamics over the Great Recession, Institute for Fiscal Studies.
- Elsinga, M. and Hoekstra, J. (2005). "Homeownership and housing satisfaction." Journal of Housing and the Built Environment 20(4): 401-424.
- Emoh, F. and Nwachukwu C. (2011). "Critical Issues in real Estate finance as an index in building construction project management success in Nigeria." American Journal of Social and management science 2(1): 76-90.
- Eni, C. M. (2015). Establishment of strategies for improving affordable and habitable public housing provision in Anambra State, Nigeria. *British Journal of Environmental Sciences*, 3(1), 23-42.
- Ezeigwe, P. C. (2015). Evaluation of the causes of housing problems in Nigeria: a case study of Awka the capital city of Anambra State. *Journal of Economics and Sustainable Development*, 6 (20), 87, 93.
- Ezimuo, P. N., Onyejiaka, C. J., and Emoh, F. I. (2014). Sources of real estate finance and their impact on property development in Nigeria: A case study of mortgage institutions in Lagos metropolis. *British Journal of Environmental Research*, 2(2), 35-58.
- Eurostat-Data explorer (2015). Distribution of population by tenure status, type of household and

- income group *Retrieved 14 April 2015.* http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database
- Fabi, J. K. (2018). Risk Allocation Framework Development for Buildoperate-Transfer Highway Projects in Nigeria (Doctoral Dissertation, Universiti Teknologi Malaysia).
- Follain, J., Lim, G. C., and Renaud, B. (1980). The demand for housing in developing countries: The case of Korea. *Journal of Urban Economics*, 7(3), 315-336.
- Fasakin, J. O., Basorun, J. O., Bello, M. O., Enisan, O. F., Ojo, B., and Popoola, O. O. (2018). Effect of Land Pricing on Residential Density Pattern in Akure, Nigeria. *Advances in Social Sciences Research Journal*, *5*(1).
- Fernandez, R., and Aalbers, M. (2017). Capital Market Union and residential capitalism in Europe: Rescaling the housing-centred model of financialization. *Finance and Society*, *3*(1), 32-50.
- Festus, I. A. and Amos I. O. (2015). "Housing Policy in Nigeria: An Overview." American International Journal of Contemporary Research 5(2): 23.
- Fieldhouse, A. J. (2019). Essays on US Federal Housing Credit Policy.
- Fink, A. (2015). How to conduct surveys: A step-by-step guide, Sage Publications.
- Finocchiaro, D., Nilsson, C. H. R. I. S. T. I. A. N., Nyberg, D., and Soultanaeva, A. L. B. I. N. A. (2011). Household indebtedness, house prices and the macroeconomy: a review of the literature. *sveriges riksbank economic review*, 1, 6-28.
- Flick, U. (2015). Introducing Research Methodology: A Beginner's Guide to Doing a Research Project. SAGE Publications.
- Follain, J. R., and Zorn, P. M. (1990). The unbundling of residential mortgage finance. *Journal of Housing Research*, 1(1), 63-89.
- Follain, J., Lim, G.C., Renaud, B. (1980). "The demand for housing in developing countries: The case of Korea." Journal of Urban Economics 7(3): 315-336.
- Fornell, C., and Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing research*, 19(4), 440-452.
- Fornell, C., and Larcker, D. F. (1981). Evaluating Structural Equation Models with unobservable variables and measurement error. journal of marketing research, 18(1), 39-50.
- Freeman, L. (2006). Comment on Kirk Mcclure's "The low-income housing tax credit program goes mainstream and moves to the suburbs".
- Fung, A. (2015). "Putting the public back into governance: The challenges of citizen participation and its future." Public Administration Review 75(4): 513-522.
- Fuller-Thomson, E., Hulchanski., J. D., Hwang, S. (2000). "The housing/health relationship: what do we know?" Reviews on environmental health 15(1-2): 109-134.
- Ganiyu, O., Muzliu, B., and Elumah, L. O. (2018). Mortgage Financing and Housing Development in Nigeria. Fountain University Osogbo Journal Of Management, 2(1).
- Gardner, D. (2007). Access to housing finance in Africa: Exploring the issues. Finmark trust, Zambia.
- Gasparėnienė, L., Remeikienė, R., and Skuka, A. (2016). Assessment of the impact of macroeconomic factors on housing price level: Lithuanian case. *Intellectual Economics*, 10(2), 122-127.
- Gbadegesin, J. T., Oladokun, S. O., Van Der Heijen, H., and Boelhouwer, P. (2016). Formulating an

- effective public private partnership policy for housing provision in Nigeria Urban Centers: A conceptual approach. Proceedings of the 9th cidb Postgraduate Conference, emerging trends in construction organizational practices and project management knowledge area. 2nd-4th February University of Cape Town, South Africa
- Gefen, D., Straub, D., and Boudreau, M. C. (2000). Structural Equation Modeling and regression: Guidelines for research practice. Communication of the association for information systems, 4(1), 7.
- Ghasemi, A., and Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. International Journal of Endocrinology and Metabolism, 10(2), 486–489. http://doi.org/10.5812/ijem.3505
- Ghahroodi, Z. R., Baghfalaki, T., and Ganjali, M. (2015). Outlier Detection and a Method of Adjustment for the Iranian Manufacturing Establishment Survey Data. Applications & Applied Mathematics, 10(1).
- Ghebru, H. and Okumo, A. (2017). Land administration service delivery and its challenges in Nigeria:

 A case study of eight states, Intl Food Policy Res Inst.
- Gilbert, A. (2014). Housing the urban poor. The companion to development studies, 21, 257-262.
- Gilbert, A. (2004). Helping the poor through housing subsidies: lessons from Chile, Colombia and South Africa. *Habitat international*, 28(1), 13-40.
- Gilbert, N. M. (1968). "The History, Principles and Practice of Banking.." New York Greenwood Press.
- Girouard, N., and Sveinbjörn B. (2001). House Prices and Economic Activity. OECD Working Paper No. 279. Paris: OECD
- Goke, A. A. (2006) Seminar Paper on Public Service Reform for Sustainable Development: The Nigeria Experience Keynote Address at the Commonwealth Advance Seminar Paper, 20 February–3 March
- Graaskamp, J. A. (1992). Fundamentals of real estate development. *Journal of Property Valuation and Investment*.
- Gravetter, F. J., and Forzano, L. B. (2012). Research Methods for the Behavioral Sciences (4th ed). Belmont, Calif.: Wadsworth
- Green, S., and Salkind, N. (2005). Using SPSS for Windows and Macintosh: Understanding and analysing data.
- Grey, M. S. (2012). The role of low-income urban housing delivery schemes in curbing the housing problem in the city of Mutare, Zimbabwe. *Journal of sustainable development in Africa*, 14(1), 202-216.
- Golafshani, N. (2003). Understanding relaibility and validity in qualitative research. The qualitative report, 8(4), 597-606.
- Golubchikov, O., and Badyina, A. (2012). Sustainable housing for sustainable cities: a policy framework for developing countries. *Nairobi, Kenya: UN-HABITAT*.
- Gordon-Salant, S., Lantz, J., and Fitzgibbons, P. (1994). Age effects on measures of hearing disability. *Ear and Hearing*, 15(3), 262-265.

- Grimes, A. and Aitken., A. (2010). "Housing supply, land costs and price adjustment." Real Estate Economics 38(2): 325-353.
- Gulong, P. (2012). "The Role of Informal Financial Institutions on Socio-economic Development of Mangu Local Governemnt Area, Plataeu, Nigeria." Unpublished B. Sc project, Department of Sociology, University of Mkar, Benue State, Nigeria.
- Gyntelberg, J., Johansson, M. W., and Persson, M. (2007). Using Housing Finance Micro Data To Assess Financial Stability Risks. *Housing Finance International*, 22(1), 3.
- Hair, J. F., Risher, J. J., Sarstedt, M., and Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*.
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., and Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. saGe publications.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications
- Hair, J. F., Hult, G. T., Ringle, C. M., and Sarstedt, M. (2014). A primer on Partial Least Squares structural equation modelling (PLS-SEM). Thousand Oaks, Califonia: SAGE Publication.
- Hair, J. F., Sarstedt, M., Pieper, T. M., and Ringle, C. M. (2012). The use of partial least squares structural equation modelling in strategic management research: a review of past practices and recommendations for future applications. Long Range Planning, 45(5), 320-340.
- Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011). The use of Partial Least Square (PLS) to Address Marketing Management Topics. Journal of Marketing theory and practices, Volumn 19(2), 135-138. Available at SSRN: http://ssrn.com/abstract=2227601.
- Hair, J. F., Money, A. H., Samouel, P., and Page, M. (2007). Research methods for business. *Education+ Training*.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2006). Multivariate data analysis (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Havard, T. (2013). Financial Feasibility studies for property development: Theory and Practice. London: Routledge.
- Hayashi, F., Ito, T. and Slemrod, J. (1988). Housing Finance Imperfections, Taxation, and Private Saving: a comparative simulation analysis of the United States and Japan. Journal of the Japanese and International economies, 2(3).
- Hervé, F. (2009). Integrating poor populations in South African cities. *Paris: Agence Française de Développement*.
- Henseler, J., Hubona, G., and Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial management & data systems*.
- Hennink, M., Hutter, I., and Bailey, A. (2011). Qualitative Research Methods. London: SAGE Publications.
- Henshaw, G. (2010). The role of private sector in the provision of affordable housing to the public. Lecture presented to the Nigerian Society of Engineers, CRS Branch, on its 2010 workshop.

- Herbert, C. E., McCue, D., and Sanchez-Moyano, R. (2013). "Is homeownership still an effective means of building wealth for low-income and minority households? (Was it ever?)." Homeownership Built to Last.
- Hilbers, M. P. L. C., Zacho, M. L., and Lei, M. Q. (2001). *Real Estate Market Developments and Financal Sector Soundness* (No. 1-129). International Monetary Fund.
- Hill, R. (1998). The mathematical theory of plasticity (Vol. 11). Oxford university press.
- Holmes-Smith, P., Coote, L., and Cunningham, E. (2006). Structural equation modeling: From the fundamentals to advanced topics. Melbourne: SREAMS.
- Hood, J. K. (1999). "The determinants of home ownership: an application of human capital investment theory to the home ownership decision."
- Hopkins, P. E. (2007). Thinking Critically and Cretively about Focus Groups. Areas 39(4), 528-535.
- Hove, M., Ngwerume, E. and Muchemwa, C. (2013). The urban crisis in Sub- Saharan Africa: A threat to human security and sustainable development. *Stability: International Journal of Security and Development*. 2(1).
- Hunt, B., and Terry, C. (2018). Financial institutions and markets. Cengage AU.
- Ibimilua, A. F. and Ibitoye O. A. (2015). "Housing Policy in Nigeria: An Overview." American International Journal of Contemporary Research 5(2).
- Ibem, E. O., Anosike, M. N., and Azuh, D. E. (2011). Challenges in public housing provision in the post independence era in Nigeria. *Journal of Human Sciences*, 8(2), 421-443.
- Ibem, E. O. (2011). The contribution of Public–Private Partnerships (PPPs) to improving accessibility of low-income earners to housing in southern Nigeria. *Journal of Housing and the Built Environment*, 26(2), 201-217.
- Ibuoye, A. (2009). Mortgage Finance as a Veritable Tool to Enhance Mass Housing Finance.

 Proceedings of the 39 th Annual Conference of the Nigerian Institution of Estate Surveyors and Valuers, Awka, Anambra State, Nigeria.
- Ifesanya, A.-K. (2012). The Role of Government Agencies in Urban Housing Delivery Insufficient Political Will and Ineffective Housing Administration in Lagos Metropolis Case Study of Ajegunle, Lagos. Faculty of Architecture, , . Institute for European Urban Studies, Germany,, Bauhaus University Weimar. PHD.
- Ijaiya, M. A., Lawal, W. A., and Osemene, O. F. (2014). Microfinance and mortgage financing in Nigeria: a rural experience. *Asian Economic Review*, 56(3), 45-56.
- Ikekpeazu, A. D. F. O. (2018). Mortgage Financing for Housing Delivery in Nigeria: The Governmental Role in Development of an Effective Mortgage Market.
- India Microfinance (2010). Housing shortages in urban India at 24.71 Million dwelling units, July 30, indiamicrifinance.com/housing-shortage-urban- india-2471.html
- Independent Newspapers Limited (2015). Nigeria's 17million housing deficit: challenges before Buhari http://dailyindependentnig.com/2015/04/nigerias- 17m-housing-deficit-challenges-buhari/ International Labour Organization (ILO), and United Nations Centre for Human Settlement (UNCHS). 1995. Shelter Provision and Employment Generation. Nairobi and Geneva: United Nations Centre for Human Settlement and the International Labour Organization.

- Isaac, D., O'Leary, J. and Daley, M. (2010). *Property Development*: Appraisal and Finance. (2nd ed.). Basingstoke, United Kingdom: Macmillan.
- Isaac, S., and Michael, W. B. (1995). Handbook in research and evaluation: A collection of principles, methods, and strategies useful in the planning, design, and evaluation of studies in education and the behavioral sciences. Edits publishers.
- Isaac, M., Allen, M., and Mary, S. (1991). "The Economic Theory of Housing Demand: A Critical Review." *Journal of Real Estate Research* 6(3): 381-393.
- Ismail, A., Bujang, A. A., Jiram, W. A., Zarin, H. A., and Jaafar, M. N. (2015). Housing Financing Facility and Affordability Level of Bumiputera within Iskandar Malaysia. *Journal of Economics, Business and Management*, 3(9), 870-874.
- Ilker, E., Sulaiman, A. M. and Rukayya, S. A (2016). Comparison of Convenience Sampling and Purposive Sampling. American Journal of Theoretical and Applied Statistics. Vol. 5, No. 1, 2016, pp. 1-4. doi: 10.11648/j.ajtas.20160501.11.
- Jang, S., Lee, S., Kim, J., and Kim, J. (2010). Relationship between demand-supply in the housing market and unsold new housing stocks. *Journal of Asian Architecture and Building Engineering*, 9(2), 387-394.
- Jiang, Y., Zhao, D., Sanderford, A., and Du, J. (2018). Effects of Bank Lending on Urban Housing Prices for Sustainable Development: A Panel Analysis of Chinese Cities. Sustainability, 10(3), 642.
- Jiboye, A. D. (2012). Post-occupancy evaluation of residential satisfaction in Lagos, Nigeria: Feedback for residential improvement. *Frontiers of Architectural Research*, 1(3), 236-243.
- Johnmark, M. and Lumun, N. (2013). "The effects of informal financial institutions on the socioeconomic development of Adikpo Town." International Journal of Business and Social Science 4(15).
- Johnson, P. F. (2014). "Developing the mortgage sector in Nigeria through the provision of long-term finance: an efficiency perspective."
- Jolaoso, B., Musa, N. A and Oriola O.A. (2012). "National Housing Trust Fund and low-income housing delivery in Nigeria: a discourse." Journal of Emerging Trends in Economics and Management Sciences 3(5): 429.
- Jones, M. (2007). Using Software to Analyse Qualitative Data. Malaysian Journal of Qualitative Research, 1, 64-76.
- Kagioglou, M. (1998). Generic Guide to the Design and Construction Protocol.University of Salford, Department of Radiology.
- Kalu, I. E., Agbarakwe, H. U., and Anowor, O. F. (2014). National housing policies and the realisation of improved housing for all in Nigeria: An alternative approach. *Asian Developing Policy Review*, 2(3), 47-60.
- Kama, U., Yakubu, J., Bewaji, P., Adigun, M. A., Adegbe, O., and Elisha, J. D. (2013). Mortgage financing in Nigeria. *Central Bank of Nigeria Occassional Paper*, (50).
- Kamete, A. Y. (2006). Revisiting the urban housing crisis in Zimbabwe: Some forgotten dimensions?. *Habitat International*, 30(4), 981-995.

- Kanjumba, F. W. (2016). Factors That Influence Funding of the Supply-Side Of Housing in Kenya: Case Study Nairobi, United States International University-Africa.
- Karley, N. K., and Whitehead, C. (2002). The mortgage-backed securities market in the UK: Developments over the last few years. *Housing Finance International*, 17(2), 31-36.
- Kavishe, N., Jefferson, I., and Chileshe, N. (2019). Evaluating issues and outcomes associated with public–private partnership housing project delivery: Tanzanian practitioners' preliminary observations. *International Journal of Construction Management*, 19(4), 354-369.
- Keke, O. V., and Emoh, F. I. (2015). Real estate investment trusts (REITs) and mortgage backed securities (MBS) as emerging trends for financing real estate development in the Nigerian capital market. *International Journal of Civil Engineering, Construction and Estate Management*, 3(2), 1-7.
- Kelvin N, P. (2017). "Challenges of Housing Finance and It Implications on Home Ownership by the Low and Medium Income Earners in Nigeria (A Case Study of Port Harcourt, Rivers State)."

 Journal of Environmental Science, Toxicology and Food Technology 11(6).
- KENPRO. (25 August, 2012). kenpro.org/sample-size-determination. Retrieved 16 January, 2016, from kenpro.org: http://www.kenpro.org/sample-size-determination-using-krejcie-andmorgantable/
- Kenny, D. A., and Judd, C. M. (1984). Estimating the nonlinear and interactive effects of latent variables. *Psychological Bulletin*, *96*, 201-210.
- Kioko, N. (2014). The effect of mortgage financing on the performance of the real estate market in Kenya. *Unpublished MSC Finance Project, University of Nairobi*.
- Kim, T., Cho, S. H., Larson, E. R., and Armsworth, P. R. (2014). Protected area acquisition costs show economies of scale with area. *Ecological Economics*, 107, 122-132.
- Kline, R. B. (2011). Principles and practice of structural equation modeling. 2011. New York: Guilford Press Google Scholar
- Koblyakova, A., (2015). Real Estate Funding: Mortgage Market Developments, FRMD40044 Real Estate Funding and Finance. Nottingham Trent University, Unpublished.
- Koss, R., and Shi, X. (2018). Stabilizing China's housing market. International Monetary Fund.
- Kulatunga, U., Amaratunga, D., and Haigh, R. (2007). Performance Measurement in the Construction Research and Development. International Journal of Productivty and Performance Management, 56(8), 673-688
- Kumo, Y. G. (2014). Nigeria: Rebased GDP-Challenges of Mortgage Sector.
- 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*. 8(2), 161-170.
- Kurihara, K. K. (2013). Monetary theory and public policy. Routledge.
- Kuttner, K. N. and Shim, I. (2013). "Can non-interest rate policies stabilize housing markets?" Evidence from a panel of 57.
- Kuttner, K. N. and Shim, I. (2016). "Can non-interest rate policies stabilize housing markets? Evidence from a panel of 57 economies." Journal of Financial Stability 26: 31-44.

- Kuye, O. (2007). Mortgage Finance in Developing Countries. Housing development and management. A book of readings, Department of Urban and Regional Planning, University of Ibadan, unpublished.
- L, C. (2014). Addressing housing deficit in Nigeria. News Agency of Nigeria (NAN) Nigeria
- LaCour-Little, M. (2000). "The evolving role of technology in mortgage finance." Journal of Housing Research 11(2): 173-206.
- Ladd, H. F. (1998). Evidence on discrimination in mortgage lending. *Journal of Economic Perspectives*, 12(2), 41-62.
- Langhan, S. (2016). The Role of Mortgage Liquidity Facilities in Housing Finance: Lessons Learned from Egypt, Tanzania, Nigeria and Malaysia.
- Lea, M. (2010). Alternative forms of mortgage finance: What can we learn from other countries?. In Moving Forward in Addressing Credit Market Challenges: A National Symposium.
- Leece, D. (1995). Rationing, mortgage demand and the impact of financial deregulation. *Oxford Bulletin of Economics and Statistics*, 57(1), 43-61.
- Leech, N. L., Barett, K. C., & Morgan, G. A. (2005). SPSS for intermediate statistics: Use and Interpretation. Psychology press.
- Lee, J. (2019). Housing, home ownership and social change in Hong Kong. Routledge.
- Lee, D. (2007). China's housing crunch. Los Angeles Times, October 5.
- Lee, T. H. (1968). Housing and permanent income: Tests based on a three-year reinterview survey. *The Review of Economics and Statistics*, 480-490.
- Levine, R. (2005). "Finance and growth: theory and evidence." Handbook of economic growth 1: 865-934.
- Levine, R. and Rubinstein Y. (2013). "Smart and illicit: Who becomes an entrepreneur and does it pay?".
- Levy, P. S., and Lemeshow, S. (2013). Sampling of populations: methods and applications. John Wiley & Sons.
- Ioannides, Y. M. (1989). Housing, other real estate, and wealth portfolios: An empirical investigation based on the 1983 Survey of Consumer Finances. *Regional Science and Urban Economics*, 19(2), 259-280.
- Loch A, Loch T and Osterhage J. (2003). Botulinum-A toxin detrusor injections in the treatment of non-neurologic and neurologic cases of urgeincontinence. Eur Urol Suppl 2:172 [Abstract 678].
- Longhurst, R. (1996). Reforcing groups: Pregnant Women's Geographical Experiences of Hamilton, New Zealand /Aotearoa. Area, 28(2), pp. 143-149. Available on http://www.jstor.org/stable/pdf/20003651.pdf
- Loutskina, E. and Strahan P. E. (2015). "Financial integration, housing, and economic volatility." Journal of Financial Economics 115(1): 25-41.
- Lwasa, S. (2014). Managing African urbanization in the context of environmental change. *INTERdisciplina*, 2(2).

- Lyons, M., Schilderman, T., and Boano, C. (2010). *Building Back Better: Delivering people-centered housing reconstruction at scale*. Practical Action, London South Bank University & International Federation of Red Cross and Red Crescent Societies (IFRC).
- Mabogunje, A. (2007). "Developing Mega Cities in Developing Countries, being text of a lecture delivered at a Colloquim organized by the 2007 Graduating Class." Department of Geography, University of Lagos on Wednesday 12.
- Mabogunje, A. L. (2003). The new mass housing and urban development policy: Social and economic impact. Being text of a public service lecture delivered to the top echelons of the federal civil service. Abuja, Nigeria.
- Mackenzie, D. I. (2005). Was it there? Dealing with imperfect detection for species presence/absence data. *Australian & New Zealand Journal of Statistics*, 47(1), 65-74.
- Maclennan, D., Muellbauer, J., and Stephens, M. (1998). Asymmetries in housing and financial market institutions and EMU. *Oxford review of economic policy*, *14*(3), 54-80.
- Maclennan, D., and Gibb, K. (1990). Housing finance and subsidies in Britain after a decade of Thatcherism'. *Urban Studies*, 27(6), 905-918.
- Makanjuola, Y. (2016). Banking Reform in Nigeria: The Aftermath of the 2009 Financial Crisis, *Springer*.
- Makinde, O. O. (2014). "Housing delivery system, need and demand." *Environment, Development and Sustainability 16(1): 49-69.*
- Marzbali, M. H., Abdullah, A., Ignatius, J., and Tilaki, M. J. M (2016). "Examining the effects of crime prevention through environmental design (CPTED) on Residential Burglary." International Journal of Law, Crime and Justice 46: 86-102.
- Marshal, I and Onyekachi, O (2014). "Funding Housing Deficit in Nigeria: A Review of the Efforts, Challenges and the Way Forward". *International Journal of Business and Social Science 5* (13).
- Marzuki, A. (2015). "Challenges in the Public Participation and the Decision-Making Process." Sociologija i prostor/Sociology & Space 53(1).
- Marsal-Llacuna, M. L., Colomer-Llinàs, J., and Meléndez-Frigola, J. (2015). Lessons in urban monitoring taken from sustainable and livable cities to better address the Smart Cities initiative. *Technological Forecasting and Social Change*, 90, 611-622.
- Mayer, C., Morrison, E., Piskorski, T., and Gupta, A. (2014). Mortgage modification and strategic behavior: evidence from a legal settlement with Countrywide. *American Economic Review*, 104(9), 2830-57.
- McGuirk, P. M. and P. O'Neill (2016). "Using questionnaires in qualitative human geography."
- Medley, M. (2011) Mortgage Theories and How They Affect Foreclosures, Consumer Attorney Services, December 5th
- Meen, G. (2011). A long-run model of housing affordability. Housing Studies, 26(7-8), 1081-1103.
- Mengjie, L., Reed, R., Wu, H. (2008). "Challenges facing housing affordability in Beijing in the twenty-first century." *International journal of housing markets and analysis 1(3): 275-287*.

- Mollica, M. and Luigi Zingales (2008): "The impact of venture capital on innovation and the creation of new businesses", Working Paper, University of Chicago
- Merton, R.K. (1957). Social Theory and Social Structure, New York, Free Press of Glencoe in
- Montgomery, R., Bhattacharya, D., and Hulme, D. (1996). Credit for the Poor in Bangladesh. *Finance against poverty*, 2, 94-176.
- Morakinyo, O. M., Adebowale, S. A and Oloruntobe, E. O. (2015). "Wealth status and sex differential of household head: implication for source of drinking water in Nigeria." *The official journal of the Belgian Public Health Association*.
- Morri, G. and Mazza A. (2014). Property Finance: An International Approach, John Wiley & Sons.
- Moore, D. (2013). Affordable housing crisis in Canada needs action, Big-City 6 Mayors, *The Canadian Press*
- Mohit, M. A., and Iyanda, S. A. (2016). Liveability and Low-income housing in Nigeria. *Procedia-Social and Behavioral Sciences*, 222, 863-871.
- Morse, J. and Richards, L. (2002). Readme first for a user's guide to qualitative methods, *London, Sage Publications*
- Moss, V. (2003). Preview of housing finance systems in four different african countries: South Africa, Nigeria, Ghana and Tanzania. *International Union for Housing Finance, London*.
- Michel, T. (2008) "Component-based structural equation modelling, *Total Quality Management* 19 (7-8), 871-886
- Micheal, L. (2010). International Comparison of Mortgage Product Offerings. . *Special Report America Research Institute of Housing 1-60*.
- Miles, D. (2013). Housing, Leverage and Stability in the wider Economy. Dallas: Bank of England.
- Miles, I. (2005). Knowledge intensive business services: prospects and policies. foresight.
- Mina, A., Lahr, H., and Hughes, A. (2013). The demand and supply of external finance for innovative firms. *Industrial and Corporate Change*, 22(4), 869-901.
- Mints, V. (2006). Specifics of Credit Risk Assessment in Mortgage Lending-Sample of Russia1. *Housing Finance International*, 21(1), 14.
- Mints, V. (2004). Strategies of Transitional Countries to Establish a Housing Finance System: the Russian Experience. *Housing Finance International*, 19(2), 25-37.
- Muchira, M. M. (2019). Challenges In The Uptake Of Pension Backed Home Loans For Public Sector Employees In Kenya (Doctoral dissertation, University of Nairobi).
- Muhammad, M., and Bichi, A. M. (2014). Constraints and challenges on housing provision in Kano city, Nigeria. *International Journal of Advancements in Research & Technology*, 3(6), 4-23.
- Mukhtar, M. M., Amirudin, R. B., Sofield, T., and Mohamad, I. B. (2017). Critical success factors for public housing projects in developing countries: a case study of Nigeria. *Environment, development and sustainability*, 19(5), 2039-2067.
- Mukhtar, M. M., Amirudin, R., and Mohamad, I. (2016). Housing delivery problems in developing countries: a case study of Nigeria. *Journal of Facilities Management*.

- Mukiibi, S. (2012). The effect of urbanisation on the housing conditions of the urban poor in Kampala, Uganda. Proceedings of the 2nd International Conference on Advances in Engineering and Technology, 20th–21st December, Noida, India
- Mulry, M. H., Oliver, B. E., and Kaputa, S. J. (2014). Detecting and treating verified influential values in a monthly retail trade survey. *Journal of Official Statistics*, 30(4), 721-747.
- Mustapha, I. (2002). "Overview of housing and urban development programme since independence."

 <u>Housing Today-Journal of the Association of Housing Corporations of Nigeria 1(6): 28-30.</u>
- Mutero, J. (2010) Access to Housing Finance in Africa: Exploring the Issues, FinMark Trust, Dar es Salaam
- National Bureau of Statistics (2012). Social Statistics in Nigeria Part III: Health, Employment, Public Safety. *Population and Vital Registration*. 71
- Nardi, P. M. (2018). Doing survey research: A guide to quantitative methods, Routledge.
- Newman, I., and Benz, C.R. (1998). Qualitative-quantitative research Methodology: Exploring the interactive continuum. *United State of America: Southern Illinois University Press*.
- Ndeche, C. B., Ezeudu, C., and Okafor, J. I. (2020). Assessment of Problems and Prospects of Residential Housing Development in Awka, Anambra State of Nigeria. *Tropical Built Environment Journal*, 7(1).
- Ndung'u, N. (2010). Growing Real Estate through Finance. In: forum on Growing Real Estate through Finance, *Kenya School of Monetary Studies*. 23 June 2010, Nairob
- Nkechi, O. T., Samuel, A. O., and Ifurueze, M. S. (2018). Housing finance market and economic growth of west africa region: a study of Nigeria, Ghana and Gambia. *The Business & Management Review*, 9(3), 188-198.
- Nor, K. M. and Pearson J. M. (2008). "An exploratory study into the adoption of internet banking in a developing country: Malaysia." *Journal of Internet Commerce* 7(1): 29-73.
- Nour, A. M. (2011). The potential of GIS tools in strategic urban planning process; as an approach for sustainable development in Egypt. *Journal of Sustainable Development*, 4(1), 284.
- Nowell, L. S., Norris, J. M., White, D. E., and Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16 (1), 1-13.
- Nubi, T. G. (2015). "Beyond Bricks and Mortar: Demystifying the Affordable Housing Debacle in a Transiting Economy." *University of Lagos*.
- Nubi, T.O. (2005). Housing Finance in Nigeria- Need for Re-Engineering (Unpublished Reports) www.housingfinance.org/pdfstorage/AfricaEFFECTIVE%20MOBILIZATION%20HOUSIN G%20nigeria .pdf (accessed May 2017).
- Nubi, T. O. (2000). Housing finance in Nigeria: Need for re-engineering. Ideal Habitat Cooperative.
- Nuno, A. and John F. A. S. (2015). "How to ask sensitive questions in conservation: A review of specialized questioning techniques." *Biological Conservation 189: 5-15*.
- Nuojua, J. (2010). "WebMapMedia: a map-based Web application for facilitating participation in spatial planning." *Multimedia Systems* 16(1): 3-21.

- Nwagbara Chigozie, L. M. (2014). "Enforcement of Mortgage Security in Nigeria." *Global Journal of Politics and Law Research* 2(2): 52-63.
- Nwankwo, O. (2014). "Implication of Mortgage Financing on Housing for All in Nigeria by the Year 2020." *International Journal of Managerial Studies and Research (IJMSR)* 2(11).
- Nwankwo, S. N. P. (2018). The Sustainable Housing Finance Sub-Sector; A Panacea For Economic and Social Benefits in Nigeria. *GOUni Journal of Management and Social Sciences*, 5(2).
- 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* 11(4): 716-733.
- 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*.
- O'Neill, B. C., Ren, X., Jiang, L., and Dalton, M. (2012). "The effect of urbanization on energy use in India and China in the iPETS model." *Energy Economics 34: S339-S345*.
- Obay, L. (2014). Financial innovation in the banking industry: the case of asset securitization, *Routledge*.
- Obiadi, B., Irouke, V. M., Ezezue, A. M., and Nzewi, N. U. (2017). Housing Inadequacy in Nigeria: The Case of Failed Government Housing Policies. *Tropical Built Environment Journal*, 1(6).
- Obi, A. N. I., and Ubani, O. (2014). Dynamics of housing affordability in Nigeria. *Dynamics*, 6(3).
- Odeny, M. (2013). Improving Access to Land and strengthening Women's land rights in Africa. In Annual World Bank conference on land and poverty', The World Bank, Washington, DC.
- Odimegwu, C. O., Akinyemi, J. O., and Alabi, O. O. (2017). HIV-stigma in Nigeria: review of research studies, policies, and Programmes. *AIDS research and treatment*, 2017.
- Oduwaye, L., Oduwaye, O., and Adebamowo, M. E. (2008). Mortgages In Nigeria.
- Ofor, T. N., and Alagba, O. S. (2019). Housing finance market and economic growth of West Africa region: a study of Nigeria and Ghana. *International Journal of Business and Economic Development (IJBED)*, 6(3).
- Ogbenjuwa, L., Egbu, C., and Robinson, H. (2018, April). A strategic approach to real estate financing: challenges & opportunities in real estate financing in Nigeria. In *RICS COBRA Conference* 2018.
- Ogedengbe, P. (2004). Globalization, Secondary Mortgage Banking and Challenges Before Nigeria. *Globalisation and Construction*, 657.
- Ogunba, O. A. (2009). Improving housing fund modelling in Nigeria: Lesson from United States and China models. *The Estate Surveyor and Valuer*, 32(1), 51-59.
- Ogunbajo, R. A., Ajayi, M. T. A., Usman, B. S., and Wali, R. I. (2015). Spatial variations in residential property development in Birnin-Kebbi, Nigeria. *Ethiopian Journal of Environmental Studies and Management*, 8(2), 206-224.
- Ogunbayo, B. F., Ajao, A. M., Alagbe, O. T., Ogundipe, K. E., Tunji-Olayeni, P. F., and Ogunde, A. (2018). Residents'facilities Satisfaction in Housing Project Delivered by Public Private Partnership (PPP) in Ogun State, Nigeria. *International Journal of Civil Engineering and Technology (IJCIET)*, 9(1), 562-577.

- Ogunnaike, A. (2017). Enhancing homeownership opportunities among middle-income earners in Nigeria: A case study of Lagos Metropolis, *University of the West of England*.
- Ogunrayewa and Madaki (1999). "The New Housing Policy and Shelter Challeneg " Journal of Environmental Sciences 3(1).
- Ojo O (2007). "Tenant Eviction Methods in Residential Property Market in Ibadan Metropolis". In Fadare W. and Adesanya A. (eds.) ("2007): Towards a Sustainable Built and Natural Environment; Faculty of EDM Conference Paper, OAU, Ile-Ife
- Ojo, A. T. (1983). Real Estate Financing in Nigeria/Le Financement Des Biens Immobiliers Au Nigeria. Savings and Development, 339-358.
- Ojoko, E. O., Abubakar, H. O., Ojoko, O., and Ikpe, E. O. (2016). Sustainable Housing Development in Nigeria: Prospects And Challenges. *Journal of Multidisciplinary Engineering Science and Technology*, *3*, 4851-4860.
- Okafor, B. N. (2016a). "Investigating the Problem of Real Estate Financing in Nigeria: A Study of United Bank of Africa, Awka." *Journal of Economics an Sustainable Development* 7(14).
- Okafor, B. N. (2016b). The Residential Housing Problem in Anambra State (A Case Study of Onitsha Metropolis). *International Journal of Civil Engineering, Construction and Estate Management*, 4(2), 1-18.
- Oke, M. O. (2012). "Insurance sector development and economic growth in Nigeria." *African Journal of Business Management 6(23): 7016.*
- Okelue, H. (2014). Geopolitical Zones, Nigeria, Power, Rotational Presidency Rotational Presidency:

 An Elixir for the Thirst for Power in Nigeri [Accessed on 10/05/2017] Available:

 https://wordofmonk.wordpress.com/2014/

 O2/16/rotational-presidency-an-elixir-for-the-thirst- for-power-in- nigeria/.
- Okonkwo, C. O. and Smith A. A. (2018). "Personality and Ethnicity as Psychosocial Factors in Understanding Corruption in Nigeria." *Practicum Psychologia* 8(1).
- Okonjo-Iweala, N., (2014). Unleashing the Housing Sector in Nigeria and Africa. In: 6th Global Housing Finance Conference. 28th May, 2014. Washington DC: World Bank.
- Okoye, T. O. (2018). Historical development of Nigerian housing policies with special reference to housing the urban poor. In *Housing Africa's Urban Poor* (pp. 73-85). *Routledge*.
- Okoye, C. O. and Onwuka, S. U. (2014). "Residents' Income Status and the Condition of Basic Physical Infrastructure Facilities in Awka Public Housing Estates." *Civil and Environmental Research*, 6 (4): 61-71.
- Oladapo, O. O. (2015). "The Viability of The Enforcement of Mortgage Security in Nigeria."
- Oladipo, F. O and Olanrewaju, S. B. O (2018). The Role of Financial Institutions in Housing Development in Nigeria, *The International Journal of Engineering and Science (IJES)*, 7(8).
- Olanrewaju, A., Shari, Z., and Gou, Z. (2019). Greening Affordable Housing: *An Interactive Approach*, *CRC Press*.
- Olanrewaju, S., Owolabi, B., and Oyebiyi, S. A. (2016). "Role of mortgage bank in housing production." International Journal of Engineering and Innovative Technology 6(2).

- Olatubara, C.O. (2007). Fundamentals of housing. In: Agbola, T., Egunjobi, L. and Olatubara, C.O. (eds) *Housing Development and Management: A Book of Readings*. Department of Urban and Regional Planning, Faculty of Social Sciences, *University of Ibadan, Nigeria, 70-106*.
- Olawale, S. B., Lawal, A. A., and Alabi, J. O. (2015). Nigeria Housing Policy: Any Hope for the Poor?. *American Research Journal of Humanities and Social Sciences*, 1(4), 29-35.
- Olayonwa, G, O. (2000). Property Management: Principles and Practice. Nigeria: DPC, Iwo.
- Olugbenga, T. D., Yusoff, N., Abd Aziz, N., and Baba, A. N. (2017). Unleashing the Potentials of Housing Sector in Nigeria as Perceived by Users. *International Journal of Built Environment and Sustainability*, 4(3).
- Oluwatayo, I. B., Timothy, O., and Ojo, A. O. (2019). Land Acquisition and Use in Nigeria: Implications for Sustainable Food and Livelihood Security. In *Land Use-Assessing the Past, Envisioning the Future*. IntechOpen.
- Oluyinka, S. A. (2017). The role of trust as a mediator in the relationship between technology factors and intention to accept internet banking in Nigeria (Doctoral dissertation, Universiti Tun Hussein Onn Malaysia).
- Oloke, O. C., Durodola, O. D., and Emeghe, I. (2015). Behavioural analysis of insurance companies in real estate investment in Nigeria. *Journal of Economics and Sustainable Development*, 6(16), 1-7.
- Olotuah, A. O. (2016). An Appraisal of Housing and Neighbourhood Quality in Residential Estates in Akure, Nigeria. *Mediterranean Journal of Social Sciences*, 7(3 S1), 424.
- Olotuah, A. O. (2010). Housing development and environmental degeneration in Nigeria. *The Built & Human Environment Review*, *3*, 42-48.
- Olvera, L. D., Plat, D., and Pochet, P. (2008). Household transport expenditure in Sub-Saharan African cities: measurement and analysis. *Journal of Transport Geography*, 16(1), 1-13.
- Omirin, M. and Antwi A. (2004). "Informality, illegality and market efficiency: a case for land deregulation in Accra and Lagos." *RICS Research Series, Foundation, London.*
- Omolola, O. O. and Ayoride O. S. (2016). "Socio-Economic Correlates of Housing Finance Strategies in Ibandan, Southwest, Nigeria." *Procedia-Social and Behavioral Sciences* 216: 295-305.
- Onibokun, A. (1985). Physical planning within the framework of National Development Planning in Nigeria. *Habitat International*, 9(3-4), 157-177.
- Onibokun, A. G. (1990). Urban housing in Nigeria. Nigerian Institute of Social and Economic Research.
- Oni-Jimoh, T. and C. L. Liyanage (2018). "Urbanization and Meeting the Need for Affordable Housing in Nigeria." *Housing Book: 73-91*.
- Oni, A. O., and Ajayi, C. A. (2011). Effects of property tax on sustainable housing delivery in Lagos State, Nigeria. *Journal of Sustainable Development*, 4(1), 173-192.
- Onyike, J. A. (2007). An assessment of the affordability of housing by public servants in Owerri, Nigeria. *Journal of land use and development studies*, 3(1), 21-34.
- Opoko, A. P. and Oluwatayo A. (2014). "Trends in Urbanisation: Implication for Planning and Low-Income Housing Delivery in Lagos, Nigeria." *Architecture Research* 4(1A): 15-26.

- Orlikowski, W.J., and Baroudi, J.J (1991). Studying Information Technology in Organizations: Research Approaches and Assumptions. *Information Systems Research*, 2(1), 1-28.
- Ortalo-Magné, F., and Rady, S. (2002). Tenure choice and the riskiness of non-housing consumption. *Journal of Housing Economics*, 11(3), 266-279.
- Ortalo-Magne, F., and Rady, S. (1999). Boom in, bust out: young households and the housing price cycle. *European Economic Review*, 43(4-6), 755-766.
- Otubu, A. (2018). The Land Use Act and equity factor in property taxation in Nigeria. *Nnamdi Azikiwe University Journal of International Law and Jurisprudence*, 9(1), 217-225.
- Ouwehand, A. and Van Daalen G. (2017). "Dutch Housing Associations: A model for social housing."
- Owuor, N. D., Githii, W., and Mwangi, M. (2018). The relationship between macroeconomic factors and mortgage market growth in Kenya. *European Scientific Journal*, 14(10), 68-82.
- Owoeye, J. O., and Adedeji, Y. M. D. (2015). Urban land acquisition for sustainable housing delivery in Akure, Nigeria. *International Journal of Developing Societies*, 4(1), 10-20.
- Owoeye, J. O. (2013). A study on environmental habitability of core residential neighbourhood in Akure, Nigeria. *American Journal of Research Communication*, 1(2), 140-153.
- Owusu-Manu, D., Edwards, D. J., Pärn, E. A., Asiedu, R. O., and Aboagye, A. (2018). Determinants of mortgage price affordability: a study of Ghana. *International Journal of Housing Markets and Analysis*.
- Owusu-Manu, D., Edwards, D. J., Badu, E., Donkor-Hyiaman, K. A., and Love, P. E. D. (2015). Real estate infrastructure financing in Ghana: Sources and constraints. *Habitat international*, *50*, 35-41.
- Oyalowo, B. A. (2018). An Assessment of Cooperative Societies and Housing Supply in Lagos State (*Doctoral dissertation*).
- Oyebanji, A. O., Akintoye, A., and Liyanage, C. L. (2011). Public-Private Partnerships Approach: A panacea to urban housing inequalities in developing countries-A case study of Nigeria. *Public Private Partnerships*, 61.
- Oyedele, O. A. (2017, June). Land-based taxes for sustainable development of Nigeria. in *International Conference on Property Tax Reform, Department of Estate Management, University of Lagos*.
- Oyedele, T (2019). The National Housing Fund (Establishment) Act 2018, available at http://www.pwcnigeria.typepad.com/. Accessed; 17th Dec, 2019
- Oyedele, O. A. (2018). Exploring The Real Estate Sector As A Veritable Tool For Economic Development Of Nigeria. In *Being a paper presented at the 48 th Annual Conference of Nigeria Institution of Estate Surveyors and Valuers at Ibadan on March* (Vol. 29, p. 2018).
- Oyedokun, T. B., Adewusi, A. O., Oletubo, A., and Thomas, O. J. (2013). Investigation of mortgage lending: An overview of Nigerian Practice. *Research Journal of Finance and Accounting*, 4(12), 150-158.
- Oyedokun, T. B., Adewusi, A. O., Ojo, B., Onakoya, B. O., and Akinbogun, S. P. (2012). Constraints to land accessibility by urban residents in Akure, Nigeria. In *Proceedings of the 4th West Africa Built Environment Research (WABER) Conference* (pp. 1249-1260).

- Ozo, A. (1990). "The private rented housing sector and public policies in developing countries: the example of Nigeria." *Third World Planning Review 12(3): 261*.
- Pallant, J. (2011). SPSS survival manual 4th edition. Everbest Printing.
- Paschke, S. R., Thiele, J. U., and Repke, H. (2009). Analyze Heterogener. *Chemie Ingenieeur Technik*, 81 (2009), 297.
- Petersen, M. A. (1999). "Banks and the role of lending relationships: Evidence from the US experience." Rassegna economica 63(1): 37-61.
- Pett, M. A., Lackey, N. R., and Sullivan, J. J. (2003). Making sense of factor analysis: The use of factor analysis for instrument development in health care research. *sage*.
- Petter, S., Straub, D., and Rai, A. (2007) Specifying formative constructs in information systems research. *MIS Quarterly*, 31(4), pp. 623-656
- Pilbeam, K. (2005) Finance and Financial Markets (2nd ed.), Basingstoke: Palgrave Macmillan
- Popoola, O. O. and Alamu O. L. (2016). "Financing Housing Services Delivery and its Challenges in Nigeria" *Journal of Economics and Sustainable Development* 7(4).
- Potts, D. (2011). Shanties, slums, breeze blocks and bricks: (Mis) understandings about informal housing demolitions in Zimbabwe. *City*, *15*(6), 709-721.
- Preacher, K. and Hayes, F. (2008) "Asymptotic and re-sampling strategies for assessing and comparing indirect effects in multiple mediator models," *Behavior Research Methods*40(3): 879-891.
- Programme, U. N. H. S. (2008). State of the World's Cities 2008/2009: Harmonious cities, Routledge.
- Rasul, I. and Rogger D. (2016). "Management of bureaucrats and public service delivery: Evidence from the nigerian civil service." *The Economic Journal*.
- Redman, A. and Tanner J. (1991). "The Financing of Corporate Real Estate: A Survey." *Journal of Real Estate Research* 6(2): 217-240.
- Reed, R. and S. Sims (2014). Property development, Routledge.
- Renaud, B. (1989). "Compounding financial repression with rigid urban regulations: lessons of the Korean housing market." *Review of Urban & Regional Development Studies* 1(1): 3-22.
- Renaud, B. (1999). "The financing of social housing in integrating financial markets: a view from developing countries." *Urban Studies* 36(4): 755-773.
- Renaud, B. (1984). Housing and financial institutions in developing countries. Chicago: International Union of Building Societies and Savings Associations.
- Renata, R. (2011). What is The Difference Between Internal and External Validity of Research Design.
- Ringle, C. M., Sarstedt, M., and Straub, D. W. (2012) A critical look at the use of PLSSEM in MIS quarterly. *MIS Quarterly*, 36, pp. 3-14.
- Rios, M. C., (2013). Economics: Principles, problems, and policies, McGraw-Hill.
- Roche, M., and Duffy, D. (2005). Heterogeneour Homebuyers, Mortage Choice and the Use of Mortage Brokers.
- Rono, M. N. (2007). Need for partnerships in Kenya slum upgrading programme, Kibera, Nairobi, in K. Grundström and A. W. Jere (Eds)

- Rubaszek, M. and Rubio M. (2017). "Does the rental housing market stabilize the economy? A micro and macro perspective." *Empirical Economics:* 1-25.
- Rust, K. (2007). Analysis of South Africa's housing sector performance. Pretoria, FinMark Trust
- Saleh, M. A (2006). "Antecedents of commitment to an Import Supplier." *Ph. D. Thesis, School of Advertising, Marketing and Public Relations, Queens land University of Technology, Australia.*
- Saravanan, P. (2007). "Recent Experiences in the Housing Finance Sector-A Study with Reference to India." *Housing Finance International* 22(1): 45.
- Sanusi, J. (2003). "Mortgage financing in Nigeria: issues and challenges." 9th John Wood Ekpenyong Memorial Lecture, Organized by the Nigerian Institution of Estate Surveyors and Valuers.
- Saunders, M., Lewis, P and Thornhill, A. (2012). "Research methods for business students (6. utg.)." *Harlow: Pearson*.
- Saunders, M. (1999). Research Methods for Businesss Students (2nd Eds.): *Pitman*.
- Saunders, M., Lewis, P., and Thornhill, A. (2007). Research Methods for Business Students, (6th ed.) London: Pearson
- Sekaran, U., and Bougie, R. (2000). Methods for Business: A Skill Building Approach.
- Sexton, M. (2003). Positivism Vs Realism. In Lecture notes presented as Research Institute of Built and Human Environment (BuHu) Postgraduate Workshop, *University of Salford.* (*November*).
- Shahini, I. (2014). "The impact of economic growth in housing loans demand in Albania." *European Scientific Journal* 10(19).
- Sheridan, J., Coakes, L. S., and Peta, D. (2006). SPSS 13.0 for Windows: Analysis without Aguish.
- Shuaribu, R. G. and Aliyu O. (2018). "Mortgage financing in Nigeria: issues and challenges." International Journal of Business and Financial Studies 45(8): 373-384
- Shukor, N. B. B. M., Said, R. B., and Majid, R. B. A. (2016). The Relationship between Housing Finance and Macroeconomics Variables in Malaysia. In *MATEC Web of Conferences* (Vol. 66, p. 00100). EDP Sciences.
- Sinai, T., and Waldfogel, J. (2005). Do low-income housing subsidies increase the occupied housing stock?. *Journal of public Economics*, 89(11-12), 2137-2164.
- Singer, J. (2014). No fate but what we make. *The Routledge International Handbook of Social Justice*. 300.
- Slemrod, J. (1982). Down-payment constraints: tax policy effects in a growing economy with rental and owner-occupied housing. *Public Finance Quarterly*, *10*(2), 193-217.
- Smith, P. (2013). Sampling and estimation for business surveys. *Designing and conducting business surveys*, 165-218.
- Squire, P., and Moncrief, G. (2019). *State legislatures today: Politics under the domes*. Rowman & Littlefield.

- Sosik, J. J., Kahai, S. S., and Piovoso, M. J. (2009). Silver bullet or voodoo statistics? A primer for using the partial least squares data analytic technique in group and organization research. *Group & Organization Management*, 34(1), 5-36.
- Stephen, M. and Quilgars, D. (2008). Sub-prime Mortgage Lending in the UK. European Journal of Housing Policy, 8(2).
- Stiglitz, J. E. (1998). International financial institutions and the provision of international goods. *EIB Papers*, 3(2), 116-132.
- Storm, S. (2018). "Financialization and economic development: a debate on the social efficiency of modern finance." *Development and Change* 49(2): 302-329.
- Streeten, P. P. (1980). "Basic Needs in the Year 2000'. ." The Pakistan Development Review. 19(2).
- Stemler, S. E. (2015). Content analysis. *Emerging trends in the social and behavioral sciences: An Interdisciplinary, Searchable, and Linkable Resource*, 1-14.
- TAIWO, O. D. (2018). FACTORS INFLUENCING AFFORDABLE HOUSING SUPPLY IN NIGERIAN CITIES. Faculty of Built Environment Malaysia Universiti Teknologi Malaysia. PHD.
- Talba, I. (2004). "Implementation of the monetisation policy in the federal civil service of nigeria." *Wellington, New Zealand*.
- Tan, T.-H. (2008). "Determinants of homeownership in Malaysia." *Habitat International* 32(3): 318-335.
- Tanko, B. L., Abdullah, F., and Ramly, Z. M. (2017). Stakeholders assessment of constraints to project delivery in the Nigerian construction industry. *International Journal of Built Environment* and Sustainability, 4(1).
- Thorncroft, M. (1965). Principles of estate management, Estates Gazette, Limited.
- Tibaijuka, A. K. (2005a). Report of the fact-finding mission to Zimbabwe to assess the scope and impact of Operation Murambatsvina.
- Tibaijuka, A. K. (2005b). A message from the Executive Director. Habitat Debate, 11(3). 2.
- Tiwari, P. and Debata P. (2008). "Mortgage market in India." Mortgage Markets Worldwide: 34-68.
- Tipple, A. G. (1994). The need for new urban housing in sub-Saharan Africa: Problem or opportunity. *African Affairs*, 93(373), 587-608.
- Treece, C. (1982). DSM-III as a research tool. The American journal of psychiatry.
- Trochim, M. K. (2006). Research methods knowledge base: Unit of analysis.
- Trust, E. a. F. (2010). Overview of the Housing Finance Sector in Nigeria D. f. I. D. D. a. t. B. M. G. Foundation. UK, Centre for Affordable Housing Finance in Africa.
- Ubale, M. Y. (2013). Comparative study between Malaysian and Nigerian formal low cost housing policy issues (*Doctoral dissertation, Universiti Tun Hussein Onn Malaysia*).
- Ubom, A. U., and Ubom, U. B. (2014). The contributions of primary mortgage institutions (PMIS) to real estate development in Nigeria. *International Journal of Finance and Accounting*, *3*(3), 157-61.
- Udechukwu, C. E. (2008). Obstacles to individual home ownership in Nigeria. *International Journal of Housing Markets and Analysis*.

- Udoekanem, N. B., Adoga, D. O., and Onwumere, V. O. (2014). "Land ownership in Nigeria: Historical development, current issues and future expectations." *Journal of environment and Earth science* 4(21): 182-188.
- Udoka, C. O. and Owor M. K. (2017). "Mortgage financing and housing development in Nigeria." International Journal of Research-Granthaalayah 5(5): 182-206.
- Uganda, U. N. F. P. A. (2007). State of Uganda population report. *Planned Urbanization for Uganda's Growing Population*.
- Ugonabo, C. U. and Emoh F. I. (2013). "The Major Challenges to Housing Development and Delivery in Anambra State of Nigeria" *Civil and Environmental Research* 3(4).
- Ukwayi, J. K., Eja, E. E., Ojong, F. E., and Out, J. E. (2012). "An assessment of Housing delivery in Nigerian Federal Mortgage Bank Scenerio." Canada Social Science 8(6).
- UN-HABITAT (2006b). Shelter for All: The Potential of housing Policy in the Implementation of the Habitat Agenda. *United Nations for Human Settlements. Nairobi, Kenya*. Nairobi
- UN-HABITAT (2013). State of the world's cities 2012/2013: Prosperity of cities. Routledge.
- UN-HABITAT, (2010); A Practical Guide for Conducting: Housing Profiles
- UN-HABITAT (2008) Housing Finance Mechanisms in Bolivia; The Human Settlements Finance Systems series, Nairobi
- UN-HABITAT (2006a). Enabling shelter strategies: A review of two decades of implementation. Nairobi *UN-HABITAT*.
- UN-HABITAT (2005). Urbanization challenges in Sub-Saharan Africa, Nairobi,
- UN-Habitat. (2004). The challenge of slums: global report on human settlements 2003. *Management of Environmental Quality: An International Journal*, 15(3), 337-338.
- UN-HABITAT (2001). The state of the world's cities 2001. *United Nations for Human Settlements.*Nairobi, Kenya.
- Urbach, N., and Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information technology theory and application*, 11(2), 5-40.
- Usman, H. (2016). Homeowners' perception on mortgage financing: a case of Bauchi metropolis Nigeria, Universiti Tun Hussein Onn Malaysia.
- Usman, A. (2013). Determinants of electricity consumers satisfaction in selected electricity distribution zones in Nigeria: Implications for regulatory activities *Journal of Asian Business Strategy*, 3(6) 103-124.
- Usman, H., Garba, M. H., and Abdullahi, I. (2015). "Predicting intention of using mortgage in financing homeownership in Nigeria: Application of the theory of planned behaviour." *The Social Sciences* 12(3): 509-516.
- Usman, H. and Lizam M. (2016). "Determinants of intention of using mortgage in financing home ownership in Bauchi, Nigeria." *International Journal of Housing Markets and Analysis* 9(3): 320-339.
- UNICEF. (2016). Jordan population and housing census 2015.
- Van Order, R. (2007). "Modeling the credit risk of mortgage loans: a primer."

- Van Teijlingen, E., and Hundley, V. (2002). The importance of pilot studies. *Nursing Standard (through 2013)*, 16(40), 33.
- Van, L. T., Sang, N. M., and Viet, N. T. (2015). A conceptual model of delay factors affecting government construction projects. *ARPN Journal of Science and Technology*, 5(2), 92-100.
- Vanguard Newspapers (2013). Architects Decry Delay in Getting Building Plans

 Approved in Lagos [online]. Available from:

 http://www.vanguardngr.com/2013/05/architects-decry-delay-in-getting-building plansapproved-in-lagos/ [Accessed 14 October 2019].
- Velayutham, S, Aldridge. J. and Afari, E. (2013). Students' Learning Environment, Motivation and Self-Regulation: A Comparative Structural Equation Modeling Analysis, in Khine, M.S. (Ed), Application of Structural Equation Modeling in Educational Research and Practice 6 (2013), page 115-133.
- Victoria, A. A., Adetiloye, K. A., Isibor, A. A., and Okafor, T. C. (2016). "The Assessment of the Contribution of Primary Mortage Institutions to Housing Finance in Nigeria: A Case Study of Union Homes Savings and Loans PLC." Asian Journal of Information Technology 15(13): 2094-2100.
- Vinzi, V. E., Trinchera, L., and Amato, S. (2010). PLS path modeling: from foundations to recent developments and open issues for model assessment and improvement. In *Handbook of partial least squares* (pp. 47-82). Springer, Berlin, Heidelberg.
- Visković, J., Smiljanić, A. R., and Ivić, I. (2015). Housing Loans Determinants before and during Financial Crisis. *International Journal of Economics and Management Engineering*, 9(4), 1084-1092.
- Vuyisani, M. (2001). The State of Housing Finance in South Africa In *IUHF Journal* 16 (2).
- Walley, S. (2010, September). Housing finance in Africa: Are we post crisis yet. In *Presentation to the African Union for Housing Finance Annual Conference* (Vol. 22).
- Walliman, N.S.R. 2006. Social Research Methods. London SAGE.
- Warnock, V. C. and Warnock F. E. (2008). "Markets and housing finance." *Journal of Housing Economics* 17(3): 239-251.
- Wapwera, S. D., Parsa, A., and Egbu, C. (2011). Financing low income housing in Nigeria. *Journal of Financial Management of Property and Construction*, 16(3), 283-301.
- Waziri, A. G. and Roosli R. (2013). "Housing Policies and programmes in Nigeria: A review of the Concept and Implementation " *Business Management Dynamics* 3(2).
- Werigbelegha, A. P. and Petre E. G. (2018). "Impact of Primary Mortgage Institutions' Investments on Economic Growth in Nigeria (1995-2017)." *International Journal of Business and Management Review* 6(10): 47-55.
- Whitehead, C., and Williams, P. (2011). Causes and consequences? Exploring the shape and direction of the housing system in the UK post the financial crisis. *Housing Studies*, 26(7-8), 1157-1169.
- Whitehead, C. and Yates J. (2007). "Increasing Affordability Problems-A Role for Shared Equity Products? Experience in Australia and the UK." *Housing Finance International* 22(1): 16.

- White, E. N. (2014). The regulation and reform of the American banking system, 1900-1929, *Princeton University Press*.
- Winston, N. and Eastaway M. P. (2008). "Sustainable housing in the urban context: international sustainable development indicator sets and housing." Social Indicators Research 87(2): 211-221.
- Wisker, G. (2009). The Undergraduate Research Handbook. Great Britain, United Kingdom: Palgrave Macmillan.
- Williams O. S. (2019). Accident Prevention Model for The Building Construction Industry. *Ph. D Thesis, Universiti Teknologi Malaysia*
- William, D. M. (2010) "Instructional Methods for Public Safety' Computer Communication and Learning (2010), 117-127.
- Woetzel, J. R. (2014). A blueprint for addressing the global affordable housing challenge. McKinsey Global Institute.
- Wong, K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
- World Bank. (2018). The World Bank DataBank.
- World Bank Group (2015). Vietnam affordable housing: A way forward. The World Bank
- Wood, S. R., & Rowley, P. N. (2011). A techno-economic analysis of small-scale, biomass-fuelled combined heat and power for community housing. *Biomass and Bioenergy*, 35(9), 3849-3858.
- World Bank Group (2014). 6th Global Housing Finance Conference Housing4all, National housing policy of Mexico. *The World Bank*.
- World Bank (2013). Planning, connecting and financing cities Now: Priorities for city leaders. World Bank, Washington, DC. www.nigerianstat.gov.ng. on 8 August.
- World Bank (2002). Algeria: World Bank to support development of mortgage loan market. Washington, D.C. World Bank.
- Yao, L., White, M., and Koblyakova, A. (2015). *House price appreciation and housing affordability: a study of younger households tenure choice in China* (No. eres2015_44). European Real Estate Society (ERES).
- Yaro, I. (2014). Recruitment and selection in the Nigerian public service: Nature, challenges and way forward. *Journal of Economics, Management and Trade*, 1005-1017.3xz
- Yates, J. (2014). "Protecting housing and mortgage markets in times of crisis: a view from Australia." Journal of Housing and the Built Environment 29(2): 361-382.
- Yin, R. K. (2014). Case study research: Design and methods (applied social research methods). Thousand Oaks, CA: Sage publications.
- Zabioullah, A. (2014). Global scarcity—A challenge to technology. *GSTF Journal on Agricultural Engineering (JAE)*. 1(1).
- Zainudin, A. (2012). A Handbook on Structural Equation Modelling. Univesiti Teknologi Mara, Kelantan: Center for Graduate Studies.

- Zami, M. S., and Lee, A. (2010). Economic benefits of contemporary earth construction in low-cost urban housing–state-of-the-art review. *Journal of Building Appraisal*, 5(3), 259-271.
- Zhihua, Z. H. O. U. (2015). The Chinese Government's New Housing Market Initiatives.
- Zhu, H. (2006). "The structure of housing finance markets and house prices in Asia."
- Zhuang, J., Gunatilake, H. M., Niimi, Y., Khan, M. E., Jiang, Y., Hasan, R., and Huang, B. (2009). "Financial sector development, economic growth, and poverty reduction: a literature review."
- Zikmund, W. G. (2003). Sample designs and sampling procedures. *Business research methods*, 7(2), 368-400.
- Zingales, L. (2014). "Presidential Address: Does Finance Benefit Society?" *The Journal Of Finance Lxx*(4).