

An Evaluation of the Factors Affecting Land Market Development in Asaba, Nigeria

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Abstract

Bearing in mind that the land market is crucial to urban housing development and that several factors influence urban land market operations, this study examined and prioritised the factors affecting effective land market development in Asaba, Nigeria. Using a purposive sampling technique, the study gathered relevant data through the administration of a structured questionnaire to 277 respondents comprising 101 practising estate surveyors and valuers, and 176 registered estate agents/private property developers. Data were analysed using descriptive statistics, while the Relative Importance Index ranking and factor analysis were employed in the analysis. Findings revealed that location/accessibility, availability of land for development, and security of land title were the three most important factors driving the Asaba land market. Further analysis after factorisation revealed that nine (9) factors (administrative, technical, negative market, financial, legal, positive market, accessibility, and urban) were responsible for 60.597% influence on the market effectiveness. Estate surveyors and landowners were found to be indispensable participants in the market. The study therefore recommends an improved city hub and road network, use of professionals in market transactions, regulation of the activities of land racketeering, application of the rental and fair market value of properties, training and regulation of quarks activities, and improved consultancy for effective land market development.

Keywords: *Development, effectiveness, land market, factorisation, Relative Importance Index, Nigeria.*

Introduction

The importance of land to humans on earth throughout the ages can hardly be overemphasised. Land is not only central but also an essential element in urban development. Land is the foundation and framework on which the economic and socio-political activities of a country function; thus, land the basis of all development (Dawidowicz & Zrobeck, 2017; Udo & Udoudoh, 2018). Land affects the welfare of people more than any other single commodity. Real estate (land) embodies

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a significant portion of wealth and contributes a substantial amount of business in developed nations. Access to land, however, has been one of the daunting challenges confronting urban dwellers in most developing nations, Nigeria inclusive.

Rapid urban development has brought dynamic changes to the land market and uses of land, thereby placing ever-increasing pressure on the demand for land in Asaba, the capital city of Delta State. The land market is one of the means through which many people can gain the right to use land in urban centres. The land market increases access to land for those people who have difficulty purchasing land through customary mechanisms, inheritance and State allocation (Freire et al., 2007). An effective land market, therefore, according to Adjekophori et al. (2019), is an essential element of any successful market economy and the cornerstone for economic and social development.

Basically, the demand for urban land is shaped significantly by the urban populace, household formation, purchasing power, locational/accessibility factors, and access to credit. The urban land market can be affected by so many factors, including demand and supply, land transaction and lease, spatial planning, land speculation, land value, formality and lack of formality of the market, and weak land administration system, among others (Adjekophori et al., 2019). Adjekophori (2018) noted that the Asaba land market is highly underdeveloped; transactions are shrouded with secrecy and huge ambiguity in its operations. The ability of the landowners or right holders to engage in meaningful transactions is sometimes hugely curtailed. For the urban land market to serve the people, it has to be effective.

The land market in Asaba today is one of the major driving forces influencing economic activities in the city compared to the oil sector and other commercial activities. Asaba land markets have a city-wide range coverage comprising surrounding cities and towns within the gazetted State Capital Territory. The real estate market in Asaba is becoming more lucrative, competitive and demanding as the needs of residents increase. Policymakers, urban planners, estate surveyors and valuers, landowners and users are interested in various factors affecting and shaping the market; however, no conscious effort has been made to systematically analyse these factors. This made the study stimulating and worthwhile to pursue. The thrust of this study, therefore, was to evaluate the factors affecting effective land market development in Asaba, Delta State, Nigeria.

Statement of the Problem

Land market development in Nigeria is quite diverse and influenced by conditions existing in the places where they are located (Okafor, 2016). Since Asaba started developing as a capital city—a major industrial and commercial hub in Delta State—civil servants, traders, industrialists and merchants see it as a haven. Thus, Asaba started experiencing a sharp increase in population. This unprecedented increase in population, resulting from a miscellany of factors—a growing influx of Internally Displaced Persons (IDPs) and

immigrants resulting from dispersals of excruciating economic conflicts, environmental disasters and rapid rate of urbanisation—have brought about a significant increase in the demand for land and housing in the city of Asaba and neighbouring towns.

Despite the social-economic benefits accrued to a well-developed land market in urban areas, the land market in Asaba remains highly underdeveloped. Similar to every other urban centre, it is characterised by limited information on the volume of transactions, the amount of land changing hands, the pattern of the distribution of land, and land prices. Land transactions are shrouded in secrecy and there is huge ambiguity in terms of market operations. Most of the land development activities there are unplanned, resulting in haphazard development with insufficient infrastructure. This becomes worrisome considering the consequences it may have on real estate market development in general. Notwithstanding its size and huge potential, the land market in the Asaba has continually missed out on the investment compass of fund managers and the research agenda of land experts; it has therefore remained relatively little researched (Adjekophori, 2018; Adjekophori et al., 2019). The topicality of the paper is related to the need for the analysis of the trends and prospects of the development of the land market in the Delta State of Nigeria, as it has a high social meaning and importance for market participants.

With so many factors influencing and affecting land markets, the objective of this research was therefore to evaluate the influencing factors of land market development in Asaba, using a factor analytic approach to ascertain and propose a workable means towards improving land market effectiveness in Delta State, Nigeria.

Literature Review

Land market development has traditionally been linked to the growth of a country's economic well-being and the quality of life of its citizens the world over. The operation of the land market impacts greatly on the nation's ability to achieve its development objectives. The development of the land market contributes to the development of the national economy, thus creating a favourable investment climate for investors (Binovska et al., 2018). Land markets, according to Palmer et al. (2009), are mechanisms by which rights in land and housing, either separately or together, are willingly traded through transactions such as sales and leases. The land is a vital input for housing. When a transaction on land is done from a legitimate standpoint, only the rights can be transferred from a seller to a purchaser. This necessitates special arrangements to have an effective urban real estate market.

Urban land markets play a crucial role in shaping urban development outcomes by determining the location, density, form and price of residential, commercial, and industrial development (Serra et al., 2004; Šečkutė et al., 2016). These authors further state that urban land markets are motivated by both demand and supply factors. On the demand side, population growth, level of income and economic activities define how much land

is demanded to support expansion. Land supply is determined by topographical and physical conditions, patterns of land ownership, availability of infrastructures such as roads, electricity, water, etc., and government regulation.

Land markets provide the basis for improving resource allocation and influence house prices in urban areas (Mahoney et al., 2007). According to Adjekophori et al. (2020), sometimes the ability of the landowner or right holder to engage in a significant deal is extremely curtailed by an ineffective land market. Urban land market and access have to be well-organised for it to serve the people. The capacity and ability of banks and other financial institutions to lend money are underpinned by an effective land market (Mahoney et al., 2007). The land market performs the functions of bringing owners and users together to fix land prices and distributing land, and playing an imperative role in certifying that land is used efficiently (Lall et al., 2009; Gonda, 2019). An efficient land market is a cornerstone for economic and social development.

Factors Affecting the Urban Land Market

Urban land markets can be affected by demand and supply, land sale and lease, spatial planning, speculation that affects land price, and formality and informality of the urban land market.

Basically, demand for urban land is shaped gently by urban population growth (rate of urbanisation), household formation (household size), purchasing power (income), access to credit, and location factors (Palmer, et al., 2009; Gonda, 2019). Public policies such as zoning, property taxes and construction of infrastructure also affect the demand and supply of land (Waddle & Moore, 2008). High property transfer taxes and other land-related taxes can effectively weaken demand for urban land. Demand for land affects the meaning attached to the land and the institutions that manage it. As Do Sul (2004) indicates, when land is abundant, its value is provided by its symbolic meaning and management is carried out by local institutions. When demand further increases, the tendency is to see the land as a commodity that can be bought and sold in principle by transferring property rights. As demand grows more and more, access to land through the market becomes the predominant means (Do Sul, 2004). The market can respond positively to demand by supplying land that matches the demand.

High demand for land is an incentive for people to sell their property or for the government to make land available in the market. High demand for urban land leads to the conversion of agricultural land around peri-urban areas to residential or industrial uses. It exerts supply pressure, yet it is not easy to make (developed) land available in the market within a short period (Dowall, 1995), because it takes time to supply developed land. Failure to balance land supply with demand results in speculation that would push land prices very high—at least temporarily. These all create land and housing shortage in urban centres. It also encourages the development of an informal land market.

According to the United Nations Economic and Social Commission for Asia and the Pacific (1997), “Land speculation occurs when the demand for land, at present or in the near future, outstrips the supply of land”. It is not only a shortage of land supply that causes problems, but speculation too. Speculation can be a result of inaccurate or unreliable land market information, particularly wrong information about land price, spatial planning, and the general trend of supply in the market. Speculation might be a manifestation of a badly governed land market (Molen et al., 2008). When the market does not properly address the need of citizens for shelter or investment, speculation takes over. Molen et al. (2008) further explains that speculation leads to informal settlements and urban sprawl, creating artificial shortages of land in the market. In this case, developers and users heavily engage in land market (start buying in bulk) in an anticipation of future land price hikes.

The land market allows land rights (title) holders to transfer the rights to buyers voluntarily. Land sale is possible when land belongs to private ownership or freehold. In many cases, those who have usufruct rights can lease but cannot sell indefinitely. Governments can sell land under state ownership either to developers or to individuals. Usually, the state land transfer takes place in the form of a lease. Individuals who hold land-use rights (LURs) are allowed to engage in a land transaction in the form of a sub-lease, which allows them to dispose of their LURs for a term shorter than the original one (Theurillat et al., 2014).

The land sales market typically functions imperfectly. The imperfection firstly exists in the form of a land supply shortage that drives the prices up high. Secondly, in many instances, there is a lack of credit (mortgage) for land and house financing. The problem is everywhere; nonetheless, it is critical in developing countries (Swinnen et al., 2006). Third, the transaction cost (fees for notary and other legal services, payment made to access information, and other costs not directly included in the land price) is high and unbearable to many. As a land sale is quite expensive, land lease is an alternative means to access land. For the lease system to be functional, it has to lay down the following foundations (United Nations Human Settlement Programme, 2003): the possibility to build on the land and have access to services of a city; specify a period; provide protection from eviction; allow sub-lease and inheritance; be easily renewed; and facilitate credit and finance.

Land sales allow the buyers to obtain freehold or perpetual ownership of land. It might also encourage investors who would like to invest in land or develop it. It might earn the poor cash for immediate needs. Free land sale, however, in the long run, may lead to negative consequences because it leads the poor who is cash striped to distress land sale. This situation leaves the poor in an undesirable position and places their lives in abject poverty for many years after the land transfer. In such a case, firstly, the state can protect the poor by providing homeowner guarantee funds, which provide relief and increase the ability to own property (Deng & Chen, 2019). Secondly, land lease or rent in urban areas can offer an alternative solution to the poor who is in dire need of

cash. The poor can transfer, under a lease arrangement, land rights temporarily without endangering the long term prospect of land ownership. A lease can still be a better alternative to buying due to its relatively low cash demand.

Access to land can be obtained through formal or informal means. In the formal land delivery system, the allocation and transfer of land conforms to existing laws such as mandatory registration and certification, planning regulations, building codes and standards (Enemark, 2010; Sivam, 2002). As Dale et al. (2010) discuss, the formal land market must operate within a clear set of policies and laws that are consistent, enforceable and acceptable to the general public. However, in developing countries, only a fraction of land markets are operating formally (Palmer et al., 2009). Formal systems, including mortgage and credit, have largely failed to reach many low-income households. In most countries, even middle-income families are left out of formal land markets. As a result, poor people engage in an informal land market that largely operates in an environment that is neither transparent nor enforceable (Freire et al., 2007). An informal land market violates a few or all of the procedures declared by a government (Enemark, 2010; Betge, 2019). In this particular case, land can be obtained or occupied without a permit or without undergoing the necessary registrations. The informal land market is often the most common way that guarantees the poor access to land and it is much bigger than the formal market in cities of the developing world (Palmer et al., 2009). Access to the formal land market is not affordable for many (Sivam, 2002; Grau et al., 2019). Opportunities for urban poor households to buy land in the informal market are ineffective and inefficient. Although land transfer is possible, it is not done in a well-organised fashion, which makes sophisticated and high standard service unlikely. It also poses other threats: a government loses control over the players involved in the market and it cannot secure transfers and protect the rights of vulnerable individuals who found themselves involved in informal transfers. In addition, the government loses huge revenue that it would otherwise have earned from land tax (transfer tax, annual land use fee and other related taxes) if the market is regulated and formalised.

Study Area

Asaba, the capital of Delta State, situated close to the River Niger, is a prominent town within the Anoma axis, strategically located on a hill at the Western edge of the Niger River. Asaba is overlooking its sister city Onitsha across the Niger Bridge, a fast-growing urban area with a population of 149,603 people as of the 2006 census and a metropolitan population of over half a million people. It lies on a longitude of 6O11'52''N and latitude of 6O43'42''E. In recent times, real estate development in the city has been on the increase due to the influx of people migrating into the city for greener pasture, culminating in a rising demand for real estate (land and housing) and other commercial activities for the teaming population. The land market in Asaba cut across the capital city to cover its environs comprising Okpanam, Ibusa, Issele Asagba, Ugbolu, Oko and Okwe. With the lucrative and competitive nature of the market, values of real estate products in Asaba is on the increase, thereby paving the way for investors from the sister city Onitsha

to come in and invest in land mainly through the construction of residential, commercial and industrial, properties. These characteristics, therefore, made the city suitable for this research.

Materials and Methods

For this study, a descriptive research design was used. The survey was conducted in October and November 2019 in Asaba, Delta State. Mainly primary data sources were consulted and a purposive sampling method was selected. Since this is a survey-based study, a well-structured, self-administered questionnaire with close-ended questions suitable for quantitative analysis was the major instrument designed and used for data collection. The questionnaire was structured using a 5-point Likert scale and distributed to a sample of 292 respondents. Respondents were requested to indicate their perception of the subject based on their awareness and knowledge. Respondents were carefully chosen, using a random but purposive sampling technique from all the categories of the target population to ensure that the right respondent with relevant knowledge and experience on the subject matter of the study were adequately selected. In total, 277 (a 95% response rate) questionnaires were duly completed and analysed. The respondents comprised 101 practising estate surveyors and valuers, 176 registered estate agents/private developers in Asaba. The respondent categories formed the major key players in land market operations who are able to provide reliable and adequate information towards achieving the study's objectives. The data collected were coded, captured and analysed with using the Statistical Package for Social Science (SPSS).

Results and Discussion

Table 1. Land market participants /operators in Asaba

Cronbach's alpha @0.81	N	Sum	Mean	RII	Std. deviation	Chi sq.	p-value
Land Owners	277	1310.00	4.7292	.946	.47660	43.22	.000
Land Users	277	1239.00	4.4729	.894	.74951		
Estate Surveyors and Valuers	277	1281.00	4.6245	.925	.64537		
Estate Agents	277	1305.00	4.7112	.942	2.43829		
Property Developers/Investors	277	1246.00	4.4982	.899	.71030		
State Ministries Of Land	277	1219.00	4.4007	.880	.87336		
Financial Institutions	277	1153.00	4.1625	.832	.88810		
Community Leaders	277	1194.00	4.3105	.862	.78320		
Legal Practitioners	277	1178.00	4.2527	.851	.86038		
Valid N (listwise)	277						

(Source: Adjekophori et al., 2019, 26)

To be effective, the land market requires some operators referred to in this study as land market participants. The descriptive analysis of the land market participants as presented in Table 1, revealed the level of their involvement. The reliability test of responses was determined through Cronbach's alpha test. The test measured the internal consistency of the item (benefits), and the result of Cronbach's alpha test showed that there is a high level of internal consistency among the items at 81% (0.81).

The Relative Important Index (RII) revealed that all the participants were important and indispensable to inland market operations. The result of the chi-square statistic (43.22) at a p-value (0.000) of less than the 0.05 significance level revealed that the opinion of respondents is significantly related; in other words, the respondents strongly agreed that the operations of the inland market are carried by listed participants in the market. However, the major and indispensable participants in the land market are owners and estate surveyors and valuers. The descriptive analysis of factors influencing the land market, which is one of the pre-occupations of this study, is presented in Table 2.

Table 2. Factors that influence Asaba land market

Cronbach's alpha @0.79	N	Sum	Mean	RII	Rk	Chi sq.	p-value
Land Ownership Pattern/Structure	277	1240.00	4.4765	.895	5	24.66	.000
Location and Accessibility	277	1364.00	4.9242	.984	1		
Security of Land Title	277	1300.00	4.6931	.938	3		
Availability of Land for Development	277	1217.00	4.3935	.978	2		
Availability of Credits from Fin Institute	277	1197.00	4.3213	.864	6		
Increasing Real Estate Development	277	1167.00	4.2130	.843	9		
Decreasing Real Estate Development	277	959.00	3.4621	.692	26		
Favourable Economy of the State	277	1189.00	4.2924	.858	8		
Professional Involvement in Land Market Activities	277	1187.00	4.2852	.857	7		
Community Involvement in Land Market Operations	277	1105.00	3.9892	.797	12		
Fraudulent Activities of Land Market Participants	277	958.00	3.4585	.798	11		
Risk in Identifying Land Owner	277	1039.00	3.7509	.750	20		
Land Speculation	277	1082.00	3.9061	.781	13		
Level of Urbanisation	277	1264.00	4.5632	.913	4		
Local and State Government Policies on Land Matters	277	1180.00	4.2599	.851	8		
Increasing Land Prices	277	1054.00	3.8051	.761	18		
Decreasing Land Prices	277	950.00	3.4296	.685	25		
Increasing Demand for Land	277	1076.00	3.8845	.777	16		
Decreasing Demand for Land	277	954.00	3.4440	.688	24		
Increasing Supply for Land	277	986.00	3.5596	.712	22		
Decreasing Supply for Land	277	954.00	3.4440	.688	24		

Informal Level of Land Market	277	1082.00	3.9061	.781	13
Weak Land Admin System	277	1094.00	3.9495	.789	12
Complex Tenure Formalisation Procedures	277	1087.00	3.9242	.785	14
Poor Land Information System	277	1138.00	4.1083	.822	10
Weak Housing Finance System	277	1088.00	3.9278	.785	15
Incompetency of Land Administrators	277	974.00	3.5162	.703	23
Incompetency of Land Market Transaction	277	993.00	3.5848	.717	21
Increasing Real Estate Development Cost	277	1073.00	3.8736	.774	17
Increasing Building Materials	277	1045.00	3.7726	.755	19
Valid N (listwise)	277				

(Source: Adjekophori et al., 2019, 26)

The analysis revealed a high Relative Important Index among the items, which indicates that all the factors are important in determining the direction of the land market. The reliability test of responses determined through Cronbach's alpha test showed a high level of internal consistency among the items, at 79% alpha test. This means the data are appropriate for further analysis and the opinion of respondents is considered suitable and reliable. The result of the chi-square statistic (24.66) at a p-value (0.000) of less than the 0.05 significance level indicated that the opinion of respondents on these factors are statistically and significantly related, in other words, the respondent strongly agreed with these factors as the most important factors determining the direction of the market. Location and accessibility as well as availability of land for development are the most important factors ranked first and second, respectively.

KMO and Bartlett's Test

KMO (Kaiser-Mayer-Olkin measure of sampling adequacy) and Bartlett's test of sphericity are validity and reliability tests, considered important to test sampling adequacy for further analysis and the hypothesis of the non-correlation matrix in factor analysis (Table 3).

Table 3. *KMO and Bartlett's Test*

Variables test	Kaiser-Meyer-Olkin measure of sampling adequacy	.766
Responses on factors that influence the effective land market in development in Asaba, Delta State	Approx. Chi-Square	2613.164
	Bartlett's test of sphericity	Df
		Sig.
		.435
		.000

(Source: Author, 2019)

Table 3 precedes factor analysis and it shows the result of KMO (Kaiser-Mayer-Olkin measure of sampling adequacy) and Bartlett’s test of sphericity. To establish the strength of the factor analysis solution, it was essential to establish the reliability and validity of the reduction through KMO and Bartlett’s test of sphericity. Bartlett’s test of sphericity for the significance of the correlation matrix of the variable indicated that the correlation coefficient matrix is significant as indicated by the p-value of 0.000, corresponding with the chi-square statistics. This suggests a rejection of the hypothesis that the correlation matrix of the variables is insignificant, because the p-value of 0.000 is less than the assumed level of significance of 0.05. Also, the KMO value is greater than 0.5, which further suggests that factor analysis can be used for the given set of data.

Table 4. Total variance explained on factors influencing Asaba land market

Component	Initial Eigen values			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.274	20.914	20.914	6.274	20.914	20.914
2	2.350	7.835	28.748	2.350	7.835	28.748
3	2.058	6.859	35.607	2.058	6.859	35.607
4	1.778	5.926	41.533	1.778	5.926	41.533
5	1.406	4.686	46.218	1.406	4.686	46.218
6	1.320	4.400	50.618	1.320	4.400	50.618
7	1.220	4.068	54.686	1.220	4.068	54.686
8	1.130	3.765	58.452	1.130	3.765	58.452
9	1.039	3.463	61.914	1.039	3.463	61.914
10	.987	3.289	65.203			
11	.937	3.123	68.326			
12	.880	2.933	71.259			
13	.780	2.601	73.860			
14	.745	2.485	76.345			
15	.690	2.298	78.643			
16	.649	2.164	80.807			
17	.630	2.099	82.906			
18	.606	2.021	84.927			
19	.565	1.882	86.809			
20	.521	1.738	88.547			
21	.481	1.605	90.152			
22	.456	1.519	91.671			
23	.400	1.332	93.003			
24	.393	1.309	94.312			
25	.376	1.254	95.566			
26	.355	1.183	96.749			
27	.295	.985	97.734			
28	.260	.866	98.600			
29	.232	.774	99.374			
30	.188	.626	100.000			

Extraction Method: Principal Component Analysis
 (Source: Adjekophori et al., 2019, 26)

The cumulative variance of the nine most associated determinant factors influencing the land market is presented in Table 4. The eigenvalue in the table and the aggregate under the eigenvalue indicate the sum of the total variance in the original variable accounted for by each of the components. The variance is simply the ratio of variance accounted for by each of the components to the total variance of the variables. The analysis required the first nine components to be extracted and the first nine components from the extracted solution and the most highly emphasised determinant factors influencing land market operation. The extraction of the sum of the square loadings explained the variability in the original 30 variables. The extracted components showed 61.914% variability in the original variables. Therefore, this study considerably reduced the data by selecting the extracted components as the most emphasised factors or components with a minimum of 38.1% loss of information. This further indicates that the outlined determinant factors are representative of the entire set of factors.

Table 5. Loading analysis of factors influencing land market activities

Determinant's factors	Factor loadings	Eigen value	% of Variance
<i>Factor 1: Administrative factors</i>		6.274	20.914
Community involvement in land market	.691		
Professional involvement in land market activities	.611		
Weak land admin system	.546		
Complex tenure formalisation procedures	.520		
<i>Factor 2: Technical factors</i>		2.350	7.835
Incompetency of land administrators	.830		
Incompetency of land market transaction	.748		
<i>Factor 3: Negative market factors</i>		2.058	6.859
Decreasing supply of land	.730		
Decreasing demand for land	.728		
Decreasing real estate development	.630		
<i>Factor 4: Financial factors</i>		1.778	5.926
Increasing cost of land acquisition	.662		
Increasing cost of building materials	.635		
Availability of credits from financial institutions	.607		
<i>Factor 5: Legal factors</i>		1.406	4.686
Security of land title	.717		
Land ownership pattern/structure	.692		
Availability of land for development	.639		

Determinant's factors	Factor loadings	Eigen value	% of Variance
<i>Factor 6: Land policy factor</i>		<i>1.320</i>	<i>4.400</i>
Land speculation	.730		
Local and state government policies on land matters	.473		
<i>Factor 7: Positive market factors</i>		<i>1.220</i>	<i>4.068</i>
Increase in demand for land	.798		
Increase in supply of land	.692		
<i>Factor 8: Accessibility factors</i>		<i>1.130</i>	<i>3.765</i>
Poor land information system	.658		
Location and accessibility	.565		
<i>Factor 9: Urban factors</i>		<i>1.039</i>	<i>3.463</i>
Level of urbanisation	.779		
Decreasing land prices	-.592		

(Source: Adjekophori et al., 2019, 28)

Table 5 presents the analysis of factors that influence land market activities. The result revealed that the nine factors loaded constitute a 61.914% variance in the determination of factors influencing land market activities in Asaba, Delta State. The cut-off point for this study is taken as 0.5 and above as a general rule of thumb applied. Factor one (1) represents administrative factors, which indicated a 20.914% variance in the determinant factors influencing land market activities in Asaba. These administrative factors include community involvement in land market, professional involvement, weak land administrative system, and complex tenure formalisation procedures. Factor two (2) represents technical factors, which indicated a 7.835% variance across 30 variables. Technical factors include incompetence of land administrator and incompetence of land market transaction. Factor three (3) represents a negative market factor, which indicated a 6.859% variance in the determinant factors influencing land market activities. This negative market factor includes a decrease in the supply of land, a decrease in demand for land, and decreasing real estate development. Factor four (4) represents financial factors, which indicated a 5.926% variance in the determinant factors. The financial factors include increasing cost of land acquisition, Increasing cost of building materials, and availability of credits from financial institutions. Factor five (5) represents legal factors, which indicated a 4.686% variance in the determinant factors influencing land market activities. The legal factors include the security of land title, land ownership pattern/structure, and availability of land for development. Factor six (6) represents land policy factors, which indicated a 4.40% variance in the determinant factors influencing land market activities. Land policy factors include land speculation, and local and state government policies on land matters. Factor seven (7) represents a positive market

factor, which indicated a 4.068% variance in the determinant factors influencing land market activities. The positive market factors include an increase in demand for land, and an increase in the supply of land. Factor eight (8) represents accessibility factors, which indicated a 3.765% variance in the determinant factors influencing land market activities. The accessibility factors include poor land information system, and location and accessibility. Factor nine (9) represents urban factors, which indicated a 3.463% variance in the determinant factors influencing land market activities. The urban factors include level of urbanisation and decreasing land prices.

Conclusion and Recommendations

The land market is crucial to urban housing development in the urban centres, and so many overt and covert factors influence and affect the effectiveness and efficiency of market operations. The study thus far examined the factors affecting effective land market development in Asaba, Nigeria, with the aim to prioritise the factors and ascertain those that mainly affect and influence the market. Findings revealed that location/accessibility, availability of land for development, and security of land title were the three most important factors driving the Asaba land market. Further analysis after factorisation revealed that nine (9) factors (administrative, technical, negative market, financial, legal, positive market, accessibility, and urban factors) were found to be responsible for a 60.597% influence on the market effectiveness. Estate surveyors and landowners were found to be indispensable participants in the market. The study therefore recommends an improved city hub and road network, the use of professionals in market transactions, regulation of the activities of land racketeering, application of the rental and fair market value of properties, training and regulation of quarks activities, and improved consultancy for effective land market development.

Limitations and Areas for Further Research

This study was limited to Asaba, the capital of Delta State in Nigeria, in scope and data collection. It is therefore suggested that further studies be advanced to cover other cities in Delta State to either affirm or refute the findings of this study and the extent to which the subject affects and influences land market development in Delta State as a whole. There is also a need to understand the incentives fostering illegal/informal land dealings, especially in the urban centres of the study area. This will further expose the implications of such activities on land market development in Delta State. The study constraints include the uncooperative attitude of some of the participants (respondents), especially the principal partners of estate surveying and valuation firms, resulting from the confidential nature of their jobs.

References

Adjekophori, B. (2018). Developing an efficient land market in Warri, Nigeria: The challenges and a road map. In A. M. Junaid, O. F. Adedayo, R. A. Jimoh, & L. O.

- Oyewobi (Eds.), Contemporary issues in issues and sustainable practice in the built environment. Proceedings of the School of Environmental Technology International Conference (pp. 1422–1430), Federal University of Technology, Minna.
- Adjekophori, B., Egolum, C. C., & Emoh, F. I. (2019). Developing an efficient urban land market in Asaba, Nigeria: The challenges and a pathway. *Journal of Economics and Finance*, 10(6), 22–31. doi:10.9790/5933-1006022231.
- Adjekophori, B., Egolum, C. C., & Emoh, F. I. (2020). The nexus between land administration and land market development in Delta State Nigeria. *British Journal of Environmental Sciences*, 8(1), 1–19.
- Betge, D. (2019). Land governance in post-conflict settings: Interrogating decision-making by international actors. *Land*, 8(31), 1–15. <https://doi.org/10.3390/land8020031>.
- Binovska, I., Kauškale, L., & Vanags, J. (2018). The comparative analysis of real estate market development tendencies in the Baltic States. *Baltic Journal of Real Estate Economics and Construction Management*, 6, 6–23. <https://doi.org/10.1515/bjreecm-2018-0001>.
- Dawidowicz, A., & Zrobeck, R. (2017). Land administration system for sustainable development—A case-study of Poland. *Real Estate Management and Valuation*, 25(1), 112–122. <https://doi.org/10.1515/remav-2017-0008>.
- Dale, P. F., Mahoney, R., & McLaren, R. (2010). *Land Markets and its modern economy*. London: UK Royal Institution of Chattered Surveyors.
- Deng, L., & Chen, J. (2019) Market development, state intervention, and the dynamics of new housing investment in China. *Journal of Urban Affairs*, 41(2), 223–247. <https://doi.org/10.1080/07352166.2017.1422983>.
- Do Sul, C. (2004). *Urban land market in Mozambique*. Research Institute for Development. Retrieved from http://www.urbanlandmark.org.za/downloads/Mozambique_land_Market_Study_20080908.pdf.
- Dowall, D. (1995). *The land market assessment: A new tool for urban management*. Washington, D.C.: World Bank.
- Enemark, S. (2010). Land markets and land rights in support of the global agenda. Paper presented at the Networking Event—World Urban Forums, Rio De Janeiro, Brazil.
- Freire, M., Ferguson B. W., Lima, R., Cira, D., & Kessides, C. (2007). The World Bank 2005 International Urban Research Symposium. *Global Urban Development Magazine*, 3(1), online.
- Gonda, N. (2019). Land grabbing and the making of an authoritarian populist regime in Hungary. *The Journal of Peasant Studies*, 46(3), 606–625. <https://doi.org/10.1080/03066150.2019.1584190>.
- Grau, A., Odening, O., & Ritter, M. (2019). Land price diffusion across borders—the case of Germany. *Applied Economics*, 52(50), 5446–5463. <https://doi.org/10.1080/00036846.2019.1673299>.
- Lall, S., Helluin, J., Freire, M., & Rajack, R. (2009). *Urban land use and land markets*. Springer.
- Mahoney, R., Dale, P., & McLaren, R. (2007). Land market—Why are they required and how will they develop? International Federation of Surveyors, July. Retrieved from https://www.fig.net/resources/monthly_articles/2007/july_2007/july_2007_

mahoney_dale_mclaren.pdf.

- Molen, P. V., Silayo, E. H., & Tuladhar, A. M. (2008). A comparative study to land policy in nine countries in Africa and Asia. FIG Working Week. Retrieved from https://www.fig.net/resources/proceedings/fig_proceedings/fig2008/papers/ts06b/ts06b_04_vandermolen_etal_3037.pdf.
- Okafor, E. C. (2016). Commercial real estate performance in Nnewi, Anambra State, Nigeria. A B.Sc. Project.
- Palmer, D., Fricška, S., & Wehrmann, B. (2009). Towards improved land governance. Land Tenure Working Paper11 (p. 60). FAO.
- Šečkutė, V., Semjenovs, A., & Isküll, S. (2016). Baltijas mājokļu pieejamības indekss [Housing Affordability Index in Baltic States]. Retrieved from https://www.swedbank-research.com/latvian/baltijasmajoklu/2016/q1/hai_final_lv_2015_4q.pdf.
- Serra, M. V., Dowall, D. E., Motta, D., & Donovan, M. (2004). Urban land markets and urban land development: An examination of three Brazilian cities: Brasília, Curitiba and Recife. Working Paper 2004-03. Institute of Urban and Regional Development, University of California at Berkeley.
- Sivam, A. (2002). Constraints affecting the efficiency of the urban residential land market in developing countries: A case study of India. *Habitat International*, 26(4), 523–537.
- Swinnen, J., Vranken, L., & Stanley, V. (2006). Emerging challenge of land rental markets: A review of available evidence for Europe and Central Asia regions. World Bank.
- Theurillat, T., Rérat, P., & Grevrouser, D. (2014). The real estate market players, institutions and territories. *Urban Studies*, 52(8), 1414–1433. <https://doi.org/10.1177/004209801>.
- Udo, U., & Udoudoh, F. P. (2018). Land administration in Akwa Ibom State: Implications on housing delivery. In G. O. Udo, & F. P. Udoudoh (Eds.), *Real estate development and issues of sustainability in Nigeria. Akwa Ibom, Nigeria: IMK Prints*.
- United Nations Economic and Social Commission for Asia and the Pacific. (1997). *Urban land policies for the uninitiated*. UNESCAP.
- United Nations Human Settlement Programme. (2010). *State of the world cities 2010/2011—Cities for all: Bridging the urban divide*. Nairobi: UN-HABITAT.
- Waddle, P., & Moore, T. (2008). Foresting demand for urban land. In J. M. Marzhielff, E. Shulenberg, W. Endlicher, M. Alberti, G. Bradley, C. Ryan, U Simon, & C. ZumBrunnen (Eds.), *Urban ecology: An international perspective on the interaction between humans and nature* (pp. 349–318). US: Springer.