



Exploring the factors inhibiting Residential Property Market Efficiency in Akure, Nigeria

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Abstract. This research assessed factors inhibiting residential property market efficiency in Akure, Nigeria. Data were gathered through structured questionnaires administered to (2,668) property owners/tenants selected out of 12,325 (twelve thousand, three hundred and twenty-five) target population. Twenty-six (26) Estate Surveying and Valuation Practicing firms in Akure, as contained in the 2023 register of the head of a firm of the Nigerian Institution of Estate Surveyors and Valuers (NIEVS) Ondo State Branch, were also administered. Data collected were analyzed using the Kruskawalis Test. The study revealed no statistically significant differences in the opinion of the respondents in the three selected residential neighborhoods and the practicing Estate Surveying and Valuation firms on the factors inhibiting residential property market efficiency in Akure. The study recommended that the Government and relevant stakeholders in the property market should develop a workable framework and environment to improve the condition of the market and ensure a robust, efficient property market. Also, the Nigeria Institution of Estate Surveyors and Valuers should help provide adequate market information to ensure transparency and efficiency in the property market.

Keywords: Market Efficiency, Residential Property Market, Estate Surveyors and Valuers

1. Introduction

The property market is one of the most rapidly developing goods, attracting massive investments. The market attracts investments from large corporations, specialist companies, small contractors, and individuals (Renigier-Biłozor & Wiśniewski, 2012). Property as an asset demarcates a substantial part of the accumulated wealth of modern economies and individual households. The real property market is essential to the overall market system (Golob, Bastic, & Psunder, 2012). It relates closely to financial markets where loans for real estate investments are a significant product and an essential form of security (Herath & Maier, 2015). The market acts and sends signals to buyers and sellers through price changes. At the equilibrium price, demand would be equal to supply. As the market is always changing, the price increase would suggest an increase in demand, and the market will be disequilibrium. An increase in supply through construction activities will pull the price down while bringing the market back to equilibrium. As construction takes considerable time, there will be a lag in supply. Hence, there have been several calls for property market efficiency in most parts of the world.

On this note, market efficiency means using resources, including labour, capital, and time to produce a return or make a process perfect (Monkkonen & Roncari, 2013). Market efficiency connotes that a market has considered all information, and the market prices reflect this information. Market efficiency, however,

does not simply occur by itself or because information is freely available in the market. Osie (1998) opined that it depends heavily on the analytical and interpretational abilities of those who trade in the market and the time they have and are ready to devote to obtaining and spreading price-sensitive information.

A market can be considered efficient if relevant information is costless and available to all market participants and effectively builds into arriving at the market prices, all agreed on the implication of information for the current price and distribution of future prices of each security, and there are no transaction costs in trading security. The efficiency of the property market is the individual participant's ability to achieve the set goals (Renigier-Biłozor & Wiśniewski, 2012).

Furthermore, market participants are the most essential entities in the real property market systems that are charged with the highest responsibility for conducting market transactions. The participants are the most complex and problem-ridden factor in market analyses and surveys (Renigier-Biłozor & Wiśniewski, 2012). They are responsible for the functioning of the entire real estate market. The level of knowledge about the market by its participants is a factor that determines the efficiency of the real estate market. Shilton and Tandy (1993), specifically looking at the quality of vacancy rate information, highlight another cause of inefficiency: an increased variance in the vacancy rates. Several other barriers that hinder measuring property market efficiency are lack of adequate data, land price movement, property price, income, or returns, which may impair the effective information retrieval in the property market (Yavas & Sirmans, 2005).

Therefore, underlying volatility in the market, cost, and difficulty of acquiring information are highlighted as prime causes of information variance. The nature of landed property, the method of conducting transactions, as most transactions are conducted privately, and the lack of information on transactions all contribute to the imperfection of competition in the real property market (Tony, Keith & Eric, 2005). Therefore, this study assesses factors inhibiting residential property market efficiency in Akure, Nigeria.

2. Literature Review

Property market efficiency is the degree to which property price instantaneously reflects all available and relevant information, such as macroeconomic

conditions and property-specific attributes (Yavas & Sirmans, 2005). Property markets have long been assumed inefficient in economic and financial literature due to several factors, such as barriers to entry, high cost of the transaction, physical attributes, and heterogeneous information. Several barriers exist in measuring property market efficiency. Financial market's efficiency is affected by several factors, including information disclosure, information asymmetry, trading environment, and transaction cost (Hong, Yang & Micheal, 2013). While analyzing a perfect market, research studies by Wisniewski and Malgorzata (2008) investigated market inefficiency and identified some factors that contributed to property market inefficiency. They include land speculation, monopolistic practices like policies adopted by municipalities, large spread between quoted for similar real estate, low asset liquidity (real estate is difficult to sell at a price equal to its market value), proactive market equilibrium, small number of transactions, irrational behavior, insufficient information and differences in interpreting data.

Yavas and Sirmans (2005) stated that the barriers to measuring property market efficiency include information disclosure, information asymmetry, trading environment transaction cost, nature of participants, and property market sectors (Yavas & Sirmans, 2005). Tomori and Ajibola (2006) also pointed out that lack of funds, poor infrastructure and service delivery, declining livelihood options, incessant civil unrest, rapid uncontrolled growth of urban information settlements, inflation rate, easy and quick transaction, transaction cost in the market, quality of information, non-payment of rent by the tenant, the density of road network, characteristics of the property, population, risk, and return, quality of property market infrastructure, management cost or problem and maintenance effort and prevalence of substandard and overcrowded urban housing contributed to the efficiency of the property market in a metropolitan area. The absence of an efficient land market is a significant constraint to housing problems. It is also a reason for the continuous aggravated level of poverty as people and citizens are prevented from freely transacting business on land.

Chandra (2010) noted that the factors influencing the urban property market efficiency include political, social, development, income and educational level, buyer's preference, economic downturn, taxation, and capital intensive. Dale, Mahonry, and McLaren (2002) argued that the real estate market does not operate in isolation, and their level of impact depends on several other external factors, which include an efficient tenure and legal framework, transparent land policies,

lack of adequate information, low level of professionalism, macroeconomic stability, non-predatory government, participants in the market, standardization and culture of the participants and market openness.

Many researchers have done a lot on this issue of market efficiency in the past. However, due to the dynamic nature of real property investment in the property market, there is a need for a current investigation into the issue to uncover the actual factors militating against property market efficiency. Kaleem et al. (2009), Chandra (2010), and Horsan and Nasrin (2012) identified a series of factors inhibiting property market efficiency, which include demographic characteristics, social factors, maintenance factors, income, language, and educational orientation have a significant role in determining the efficiency of the market. Cooray (2003) identified the factors affecting the efficiency of the market as risk factors, return on investment, liquidity of investment, tax consequences, and inflation.

Rashid and Nishat (2009) found that in Bangladesh, the most influential factors in investors' market decisions are the company's efficiency, inflation rate, easy and quick transactions, transaction cost, and quality of information. Leiser and Groh (2011) also identified factors that affect commercial property market performance as property rights, security of property rights, ease of access to loans, credit information index, soundness of bank, crime, corruption, quality of infrastructure, density of road network, taxation, cost of building materials, population, political instability degree of urbanization, ownership issue, capital intensive, lack of local knowledge of property values and natural hazards.

Aluko (2011) emphasized that neighborhood and locational attributes show more importance on house value when smaller geographical housing units are examined. Studies have shown that several significant factors influence property value in different real estate or property markets worldwide to establish the peculiar attributes that affect real estate investment in their property markets.

Bello and Bello (2007), Ajide and Kareem (2010), Li et al. (2011), Babawale and Johnson (2012), and Oloke, Simon, and Adesulu (2013) emphasized that the major factors that enhance market efficiency include location, accessibility to CBD, place of work, availability of neighborhood security, proximity to the highway, availability of electricity, building characteristics, facilities and amenities, neighborhood characteristics, age of the property, accessibility to school, fence and waste disposal availability. Efficiency is primarily defined economically, while

social, cultural, and political institutions are regarded only as constraining attributes of market operation.

The notion of adaptive efficiency is introduced, asserting that a property market can be seen as efficient if it displays tendencies to eliminate transaction costs and generally provides an environment hospitable to economic growth. Keogh and D'arcy (1999) identified the factors inhibiting property marketing efficiency, including erratic market behavior, lack of information, substantial time lags in proper development, transaction costs, decentralized trade, information deficiencies, market reactions, and imperfect market. The efficiency of fundamental property markets may be impossible or difficult to maintain due to the specific nature of real estate.

3. Research Methodology

This study employed a mixed-methods research design, targeting the occupiers of properties in the selected areas and the practicing estate surveying and valuation firms in Akure, who are the significant players in the property market in the study area. The neighborhoods investigated for the research study include the low-, medium-, and high-density residential areas in Akure. Three areas were purposively selected in each zone to form the study's coverage area. Ijapo, Oba Ile, and Shagari Estate are the areas investigated in the low-density zone. The medium-density area selected covered Fanibi-Lafe, Alaba Layout/FUTA, and Isikan, while the high-density areas included Isolo quarters, Stadium area, and Arakale. This study adopts stratified sampling, classifying each stratum as low, medium, and high-density residential corridor. For this study, the purposive sampling technique was adopted in selecting the residential corridors since covering the whole study area will be practically impossible. Systematic random sampling was also adopted in choosing the property owners, while the census method was adopted for the Estate Surveying and Valuation firms. A structured self-administered questionnaire was designed to collect the necessary data to address the study objectives. The collected data were analyzed using the Kruskal-Wallis H test.

The Kruskal-Wallis H test (sometimes also called the "one-way ANOVA on ranks") is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. It is considered the nonparametric alternative to the one-way ANOVA and an extension of the Mann-Whitney U test to allow the comparison of more than two independent groups.

The test statistic is given by:
$$H = (N - 1) \frac{\sum_{i=1}^g n_i(r_i - r)^2}{\sum_{i=1}^g \sum_{j=1}^{n_i} n_i(r_{ij} - r)^2} \dots\dots\dots (i)$$

where:

- n_i is the number of observations in the group
- r_{ij} is the rank (among all observations) of observation j from group i
- N is the total number of observations across all groups
- $r_i = \frac{\sum_{j=1}^{n_i} r_{ij}}{n_i}$ is the average rank of all observations in group
- $r = \frac{1}{2}(N + 1)$ is the average of all the r_{ij}

4. Result and Discussion

Data collected for the study were primary data from the occupiers of properties in the selected areas from high, medium, and low-density areas, the practicing Estate Surveying and Valuation firms in Akure because they are significant players in the residential property market in the study area.

4.1 Analysis and Presentation of Results.

4.1.1 Questionnaire Distribution.

During the research, data collected for the study were collected through questionnaires administered to the target population, which comprised occupiers of properties in the selected areas and practicing estate surveying and valuation firms in Akure. The results were analyzed and presented in Table 1.

Table 1: Number of Questionnaires Administered and Retrieved.

Respondents	Number distributed	Number Collected	Percent
Estate Surveyor and Valuers	26	21	80.77
Occupants of Low Density	756	493	65.21
Occupants of Medium Density	859	526	61.23
Occupants of High Density	1027	620	60.37
<i>Total</i>	<i>2,668</i>	<i>1,660</i>	<i>62.21</i>

Source: Field survey, 2023

Data collected for the study were primary questionnaires which were administered to three different sets of the population: Estate Surveyors and Valuers, Tenants or occupants of residential properties in the selected neighborhoods of Akure, Ondo State viz low density (Ijapo, Oba-Ile, and Shagari Estate), medium density (Fanibi-Lafe, Alaba Layout, and Isinkan) and high-density areas (Isolo Quarters, Stadium Area and Arakale) respectively. Type 'A' questionnaires were distributed to tenants/Occupiers; Type 'B' questionnaires were administered to estate surveyors and valuers in Akure. The results were analyzed and presented as shown in table 1.

Table 1 shows the number of questionnaires distributed and retrieved. Of the 26 questionnaires administered to Estate Surveyors and Valuers, 21 were recovered, representing 80.77%. Four hundred ninety-three questionnaires, representing 65.21%, were retrieved from the 756 questionnaires administered to the occupants of low-density areas; 526 questionnaires, representing 61.23%, were recovered from the 859 questionnaires administered to the occupants of medium-density areas while 620 representing 60.37% were retrieved from the occupants of high-density areas. In general, 1,660 out of the 2,668 questionnaires distributed were retrieved, representing 62.21%. The outcome suggests a considerable percentage of response, thus giving sound footing for further analysis.

4.1. 2 Kruskawalis Test.

Kruskawalis test was used to determine if there are statistically significant differences in Factors Inhibiting Residential Property Market Efficiency in Akure, Nigeria, between two or more groups (Low, Medium, and High Density of property occupiers and Estate Surveying and Valuation Firms) of an independent variable on a continuous or ordinal dependent variable.

Table 2: Kruskawalis' test on the factors inhibiting residential property market efficiency in the study area.

Factors Inhibiting Residential Property Market Efficiency	Residents of Low Density		Residents of Medium Density		Residents of High Density		Practicing Estate Firms		Kruskawalis test	
	WMS	Rank	WMS	Rank	WMS	Rank	WMS	Rank	Chi-Square	df
Information Disclosure	4.1116	24 th	4.3156	15 th	4.0645	23 rd	3.0000	27 th	60.636	3
Information Asymmetry	4.4604	12 th	4.5323	9 th	4.8968	1 st	2.1905	29 th	309.640	3
Trading Environment	4.2110	20 th	3.9278	28 th	3.5694	30 th	2.0952	30 th	135.723	3
Transaction Costs	3.6126	31 st	4.0570	25 th	4.2242	21 st	2.3333	28 th	206.884	3
Land Speculation	4.3347	15 th	4.2510	20 th	3.9500	26 th	4.7619	1 st	86.092	3
Monopolistic Policy Practice	4.1400	23 rd	3.8707	29 th	3.8952	28 th	4.7619	1 st	25.166	3
Low asset liquidity	4.6369	8 th	3.7300	30 th	3.6000	29 th	4.7619	1 st	426.382	3
A small number of transactions	3.9331	29 th	4.2852	17 th	4.4597	12 th	4.7619	1 st	85.020	3
Irrational Behaviour	4.6673	7 th	4.3346	14 th	4.2468	18 th	4.7619	1 st	193.448	3
Insufficient Market information	4.4787	10 th	4.5703	8 th	4.6242	7 th	4.7619	1 st	21.516	3
Property Market Transparency	4.2130	19 th	4.2814	18 th	4.2323	20 th	4.6667	10 th	16.185	3
Nature of participants	4.6795	6 th	4.8973	1 st	4.8758	2 nd	4.7619	1 st	114.616	3
Inadequate finance	4.7728	3 rd	4.6122	7 th	4.4823	11 th	4.7619	1 st	53.253	3
Poor Infrastructure	4.3022	18 th	4.2510	20 th	4.0468	25 th	4.7619	1 st	117.818	3
Service Delivery	4.8540	2 nd	4.5894	7 th	4.6677	6 th	3.1905	24 th	91.731	3
Declining Economic situation	4.7647	4 th	4.4943	10 th	4.3452	15 th	4.1429	14 th	103.210	3
Incessant civil unrest	4.5862	9 th	4.3650	12 th	4.4371	13 th	3.4762	22 nd	42.373	3
Uncontrolled growth	4.1684	21 st	4.6426	6 th	4.5565	8 th	3.1905	24 th	158.734	3
Sub-standard and overcrowded urban housing	4.7404	5 th	4.6502	5 th	4.7161	5 th	4.5238	11 th	15.911	3
Inflation rate	4.8986	1 st	4.8099	2 nd	4.7306	4 th	3.7143	19 th	65.432	3
Political Factors	4.0811	27 th	4.2700	19 th	3.9194	27 th	4.2857	13 th	66.331	3
Social factors	4.4787	10 th	4.6616	4 th	4.8419	3 rd	3.9048	17 th	146.179	3
Taxation	4.3185	16 th	4.7719	3 rd	4.3355	16 th	4.4762	12 th	122.826	3
Macro-economic stability	4.3631	14 th	3.6768	31 st	4.0484	24 th	3.0476	26 th	154.229	3
Demographics	4.3164	17 th	4.2053	24 th	4.3710	14 th	3.9048	17 th	28.880	3
Adequacy of information	4.1481	22 nd	4.2167	23 rd	4.3129	17 th	3.4762	22 nd	8.240	3
Low level of professionalism	4.4402	13 th	4.2966	16 th	4.5194	9 th	3.5714	20 th	46.051	3
Low return on Investment	4.0771	28 th	4.2395	22 nd	4.2452	19 th	3.5714	20 th	17.291	3
Low level of investment	3.7465	30 th	4.3954	11 th	4.4984	10 th	4.1429	14 th	271.116	3
Regulatory Components	4.1075	26 th	4.3498	13 th	4.1968	22 nd	3.9524	16 th	24.906	3

Source: Field Survey, 2023

The research examined the respondents' opinions in the low-density areas on the factors inhibiting residential property market efficiency in the study area. The analysis revealed that the significant factors, as opined by the low-density areas, include Inflation rate (4.8986), Service Delivery (4.8540), Inadequate finance (4.7728), Declining Economic situation (4.7404) and Sub-standard and overcrowded urban housing (4.7404) which have been ranked 1st, 2nd, 3rd, 4th and 5th respectively.

The opinion of the respondents in the medium-density a reason the factors inhibiting residential property efficiency includes Nature of participants (4.8973), Inflation rate (4.8099), Taxation (4.7719); Social factors (4.6616) and Sub-standard and overcrowded urban housing (4.6502) which have been ranked 1st, 2nd, 3rd, 4th and 5th respectively.

The opinion of the respondents in the high-density areas also showed that the major factors inhibiting residential property market efficiency include Information Asymmetry (4.8968), nature of participants (4.8758), Social factors (4.8419), inflation rate (4.7306), and Sub-standard & overcrowded urban housing (4.7161) which have been ranked 1st, 2nd, 3rd, 4th and 5th respectively.

The practicing estate surveying and valuation firms, on the other hand, opined that the significant factors inhibiting residential property market efficiency include Land Speculation, Monopolistic Policy Practices, Low asset liquidity, small number of transactions, Irrational Behaviour, insufficient market information, ranked 1st respectively with a mean score of 4.7619.

The Kruskawalis test results showed no statistically significant differences in the opinion of the respondents in the three selected residential neighborhoods and the practicing Estate Surveying and Valuation firms on the factors inhibiting residential property market efficiency in Akure.

5. Conclusion

The study assessed the factors inhibiting residential property market efficiency in Akure. It highlighted the factors inhibiting residential property market efficiency, including information disclosure, inadequate finance, poor infrastructure, insufficient market information, and non-transparency of the property market. Therefore, it is pertinent to state here that the market is a sine a qua non to effective property market development as it helps in the practical and optimum utilization of optimal resources while ensuring the property products are delivered at a prevailing market price. Thus, adequate market policies are hoped to ensure market transparency and efficiency.

6. Recommendation

Based on the above findings, the following recommendations are put forward:

- There should be a check on land speculation to enhance the efficiency of the residential property market in Akure, Nigeria.
- The relevant data for market efficiency should be looked into, and a mode of preparation and availability of such data through schedules and data banks should be ensured to ensure market efficiency.
- Since the market is information-based, the Nigerian Institution of Estate Surveyors and Valuers (NIESV) and Estate Surveyors and Valuers Registration Board of Nigeria (ESVARBON) should look into adequate availability and dissemination of market information for market efficiency.
- The economic indices and, of paramount importance, the inflation rate have a significant impact on the efficiency of the property market. Thus, the government should employ the necessary strategies to stabilize.
- Real estate professionals such as Practicing Estate Surveyors and Valuers should look into a more effective and efficient service delivery method for enhancing real estate market efficiency.

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