Price Determination for Residential Properties in Lagos State, Nigeria: The Principal-Agent Dilemma

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Keywords	Abstract
Housing Market Optimal Pricing Principal Agent Dilemma	Arbitrary house pricing by property owners based on existing or expected economic situation partly explain the glut and proliferation of vacant properties in the housing market awash with demand for same. This study takes a look at the process and strategy of house pricing, the factors considered in determining housing price and the factors that prolong listing period in the residential property market. Primary and secondary data were gathered for the study. Primary data was collected with structured close-ended questionnaires administered to three groups of respondents, property owners, professional property managers and real estate developers in Lagos State. A total of 240 questionnaires were administered to senior management staff of these organizations and another 113 to property owners accessed through the estate agents involved in this survey. Secondary data was also obtained from existing journal articles, online resources, dailies and books. Data from the questionnaire survey was collated and analysed with the aides of descriptive tools such as percentages, 5-point likert scales and ranking. Findings showed amongst others that house prices in the residential property market are largely fixed and reserved by the sellers. It was also found that these sellers do not consider many of the determinants of housing price. Moreover, the doldrums in the housing market is caused by the speculative investors, resale, overpricing, lack of adequate knowledge of the housing market and lack of trust in the competence of the professional agents to fix price acceptable to the seller. It was therefore recommended that sellers undertake the valuation of their property before putting it in the market and that they should trust in the competence of the agent to advise on price deemed optimal for the property.

1. Introduction

The real estate industry is dichotomized along two principal sectors; the construction/sellers (supply) market and the buyers (demand) market. Although, each of these two markets is replete with various challenges that are common or specific in nature, one daunting challenge in the demand market is the pricing of real estate products. Proper pricing of real estate products has attracted attention from stakeholders for various reasons including prolonged listing period, glut, voids and delayed amortization. Proper pricing of real estate product is crucial to facilitating transaction in real estate market whether rental or outright sale, as it encourages investors and promotes activities in the construction sector. Recent history according to [1] suggests that fluctuations in real estate prices, whether in bubble or burst mode, have the potential to buoy up or wreak havoc on the financial sector and the rest of the economy. [2] show that variations in real estate prices have had a significant effect on aggregate consumption in the United States, far more significant than the stock market. Hence, [1] opine that understanding what drives real estate values is no less important than is, understanding the pricing dynamics of other asset classes such as stocks, bonds, commodities and currencies.

The tumult in the financial market and its cascading effect in real estate market have left many real estate owners and investment managers bewildered as per how to properly price real estate products, particularly residential properties. [3] opine that unlike purchases made at retail stores, real estate prices are not fixed and that prices in most areas are influenced by demand and supply. For some reasons however, the real estate market prices in other areas seem to be dictated by what comes across as quite a different set of forces [4]. Understanding therefore the determinants of housing prices is important because of the implications of house price trends on mortgage default and collateral risk assessment [5]. Moreover, housing is both a durable consumption good and a financial asset [6] and has continued to play a significant role in man's development, economic and financial stability. In recent time, investors, consultants, analysts, policymakers and financial institutions have developed keen interest in house prices for different purposes such as understanding real estate and credit market conditions, monitoring the impact on economic activity, financial stability and soundness [7]; [8] and [3]. In other words, understanding the pattern and nature of residential property price dynamics has become an important element in assessing the macroeconomic situation and outlook of a country, especially as the bursting of housing bubbles in Europe and the United States has been a key contributing factor to the recent global financial crisis [9].

Apart from the economic theory of demand and supply guiding price determination process of most economic goods and services, several other factors have been identified to influence the pricing and prices of residential properties. [10] observe that house prices are significantly more volatile than would be predicted by the variation in the supply and demand alone in many countries. The authors further state that sellers and

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their agents often contradict each other when it comes to the pricing of residential properties. In order to monitor the housing market and achieve right pricing, it is important to understand first the determinants of house prices. Recently, very strong house price inflation is been experienced in key cities such as Lagos, Abuja and Port-Harcourt and this has been responsible for the glut and void experienced in both high-end and low-end residential properties in these states [11]. Achieving optimal pricing therefore is crucial to breaking the gridlock in demand and supply and facilitating absorption in the property market. Moreover, the risk of unregulated/arbitrary house prices could have significant impact on household consumption, the financial sector and the overall economy [6]. Arising from the foregoing, this study therefore set out to investigate other factors considered in housing price determination and highlight the role played by the sellers and their agents in determining optimal prices for listed properties in the Nigeria housing market. Subsequent sections deals with statement of the research problem, literature review, research methods, results and discussion while the conclusion and recommendations conclude the study.

1.1 Statement of the Research Problem

The [11] estimate the country's housing deficit at 17 million as of August 2012. The deficit is shared among high-income earners in need of luxury accommodation and low-cost affordable housing for the masses. The demand for housing in Lagos State alone is estimated at 2.17 million and required annual supply of 224,000 housing units to meet the existing need [12]. The [11] further states that key urban centres in Nigeria such as Lagos, Abuja and Port Harcourt have witnessed a hike in housing prices on a scale that is rarely seen in developing cities. In Lagos alone for instance, it is estimated that house prices rose by 400-500% between 1998 and 2008, while pressure for affordable housing in high demand areas has been outrageous, allowing prices to skyrocket and prompting many developers to invest in high-end and low-cost housing. However, it is observed that many of these new houses remain unoccupied and have been in the market for a period longer than expected. This notwithstanding, demands for housing is simultaneously rising further down Nigeria's income spectrum with a growing number of middle class young professionals in city centres. This encompasses the majority of city workers in white-collar jobs whose salaries are well above the Nigerian average, and yet could not afford the prices of houses in the market [11]. The burgeoning demand in city centres and the accumulating housing space in different parts of the city have piqued the researcher's interest, giving rise to speculation as to whether the current housing price regime is simply a case of price mismatch, inappropriate pricing strategy, principal-agent exuberances or a case of housing price bubble that will soon burst. Apart from identifying those factors affecting house price determination, there is need to clarify the roles and relationships between sellers and agents in fixing housing prices and negotiating listed houses.

2. Literature Review
2.1 Real Estate Market

The real estate market is very important, not just because it ensures construction of structures and infrastructure necessary for life and work, but also because it has a strong, multiple impact on the development of nation's entire economy [13]. Real estate market trends are strong indicators of trends in the entire economy. A real estate market can provide a lot of social and economic yields or benefits to a country if it is operated at its best. [15] classifies real estate market into real estate space market and real estate asset market. According to the author, Real Estate Space Market involves transactions for the rights to use land and buildings. On the demand side of this market, are those that are willing to pay to use space for consumption or production purposes. The supply side of the market involves property owners who are willing to sell such space to users. On the other hand, Real Estate Asset Market involves transactions pertaining to cash-flow rights in real estate. Participants in this market are concerned with the amount and timing of cash flows a building is capable of producing rather than the building's configuration for a particular use. These market participants make their decisions about buying and selling by comparing real estate assets with other capital market assets such as stock and bonds. As such, the real estate asset market is regarded as part of the larger markets for capital assets of all types [14].

2.2 Optimal Price

Price connotes the payment made by the recipient of goods or service rendered by another party. Price can sometimes alternatively refer to the quantity of payment requested by a seller of goods or services, rather than the eventual payment amount. This requested amount is often called the asking price or selling price, while the actual payment may be called the transaction price or traded price [4]. In real estate, price is consideration for the benefit of space as a function of time and this time could be temporal as in rentals and transfers of leasehold interests or perpetual as in sales of freehold interest [15]. Optimal price however is the highest price that intersects the affordable price for an effective buyer [16]. [17] use a search-and bargaining model in a theoretical treatment of the optimal listing price. In his model, the listing price attracts buyers who then inspect the asset to determine its true valuation. The buyer can then make an offer, or go to alternative opportunities. The price at which the able buyer's valuation equals the least a seller can accept is the optimal price.

2.3 Determinants of House Prices

Several studies have examined the factors affecting property pricing. For instance, [18] examine the factors determining residential property prices in Ghana and came up with four factors namely location, number of bedroom, housing facilities and neigbhourhood amenities all having significant effect on the price of houses in the region. [13] examining the factors that must be taken into account for analytical forecast of future trends in the fluctuation of real estate prices in Slovenia identified location, construction qualities and interest rates. [19] investigating the factors influencing listing price and selling price of owner-occupied residential properties in Germany identify age of the property and proximity to complementary uses. [20] examine house price determinants in twelve selected countries of the former Soviet Union. The study found that two new house price determinants apart from GDP, household wealth and lending rate/affordability of credit affected house price. These are remittance inflows and foreign inflows. [21] analyse the impact of urban land use change on property values in Victoria Island, Lagos Nigeria. Findings revealed amongst others that apart from the result of the change in congestion, noise pollution and strain on the facilities, it was observed that property values were largely affected as residential rental values rose by over 284%; while residential capital values rose by over 92%; commercial rental and sale values rose by 500% averaging a 340% increase in value between 1996 and 2004. [22] conclude that proximity to major road, number and sizes of bedroom, conveniences, motorable access road, drainage, security are the leading factors affecting property values.

2.4 Listing Period/ Time on the Market

Time on the market or days on the market can also be construed as a measure of real estate liquidity [23]. Time on the market is affected by many factors and is not under the full control of the seller who sets the selling price [24]. In 'hot' markets, the prices are generally high and sellers typically sell their houses after short marketing times and the volume of sales is higher than average. In 'cold' markets, the prices tend to decrease, longer times are needed to sell a property and the volume of sales is relatively low [25]. Economic search theory propounds that a seller who spends more time and effort in locating a buyer will find a buyer who is willing to pay a higher price for the house [26] cited in [17].

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Also, houses that remain on the market for an overly long time period often suffer from a stigma, because current buyers assume that previous buyers must have discovered a problem with the house. [17] consider the impact that the seller's listing price has on seller motivation and offer empirical evidence that higher asking prices lead to longer marketing times.

3 Research Methods
3.1 Study Area
Lagos State is the economic and commercial capital of Nigeria. The National Population Commission of Nigeria estimates the population at over 21 million in 2016 [27]. Lagos State is also known for high level commercial activities and its housing of all land, sea, rail and air ports - which makes it a major trade centre. Long term demand for residential properties and for new developments is akin to the long term vitality of the State's economy [28]. Lagos selected for this study owing to the fact that it is the hub of real estate investments, one of the few favourite spots for real estate investors, particularly in residential properties at both high end and low end locations. Moreso, a large concentration of property owners who actually engage the services of brokers are more domicile in Lagos as opposed to any other part of Nigeria. Since this research is a study of market interactions, Lagos has been established to possess adequate supply or potential supply and demand for real estate property that is needed to carry out this research. Property markets in Ikeja, Victoria Island and Lekki axis are examined in the study.

3.2 Methodology
Three categories of respondents were selected for this research. These are the registered and practicing estate surveyors and valuers, registered estate developers and property owners accessed through the firms of estate valuers. The population for the study are the 343 registered estate surveying firms and the 372 registered Real Estate Development Firms in Lagos obtained from the directories of the [29] and [30]. However, the 79 and 34 Estate Firms in Ikeja and Victoria Island and the 84 and 43 Real Estate Developers in Ikeja and Victoria Island respectively constituted the focus and sample size for this study. Thus, 240 questionnaires were administered to senior management staff of these organizations and another 113 to property owners accessed through the estate agents involved in this survey. In all, a total of 236 questionnaires were retrieved giving 66.9% overall rate of response. The pattern and rate of response is presented in Table 1. Primary data was obtained through administration of structured questionnaires and personal interviews with the selected respondents. Data is subsequently collated and analyzed by coding, classification and tabulation. Descriptive statistics adopted include percentages, frequency and relative importance index; inferential statistics adopted include regression analysis and spearman's rank correlation.

Table 1: Questionnaire administration and rate of response

Study Area	Real Estate Firm		Development Company		Property Owner		Total	
	No. Admin.	No. Retrieved (%)	No. Admin.	No. Retrieved (%)	No. Admin.	No. Retrieved (%)	No. Admin.	No. Retrieved (%)
Ikeja	79	58 (73.4%)	84	53 (63.1%)	79	53 (67.1%)	242	164 (67.8%)
Victoria Island	34	25 (73.5%)	43	28 (65.1%)	34	19 (55.9%)	111	72 (64.9%)
Total	113	83 (73.5%)	127	81 (63.8%)	113	72 (63.7%)	353	236 (66.9%)

3.3 Factors considered in house price determination
Close-ended questions were used to gain insight into those factors considered by property owners and agents when putting price on a property. The result is expressed in percentage and presented in Table 2. Options were grouped into endogenous and exogenous factors.

Table 2: Factors considered in house price determination

Determinants of Housing Price	Estate Agents		Property Owners	
	No	Percentage	No.	Percentage
Endogenous factors				
accommodation details	83	100%	70	97.2%
amenities	83	100%	13	18.1%
construction quality	83	100%	31	43.1%
Finishes	83	100%	29	40.3%
Design	83	100%	33	45.8%
Size	83	100%	24	33.3%
Age	83	100%	23	31.9%
state of disrepair	83	100%	29	40.3%
size of land	83	100%	55	76.4%
Exogenous factors				
Comparables	71	85.5%	21	29.2%
interest rate	27	32.5%	26	36.1%
market condition	68	81.9%	53	73.6%
construction cost	72	86.7%	61	84.7%
demand	56	67.5%	28	38.9%
Supply	38	45.8%	24	33.3%
neighbourhood facilities	74	89.2%	36	50.0%
Location	83	100%	66	91.7%

The analysis presented in Table 2 showed that emphasis is placed on property characteristics and peculiarities by most agents than external factors when fixing prices on housing properties. Notwithstanding, external attributes are also given proper consideration by many of these agents as shown by the above average (50%) approval rate. Factors such as location, neighbourhood facilities, construction cost, comparables and market conditions as well as the level of demand of similar properties are considered alongside endogenous factors when advising on the price of a property. Most property owners on the other hand give priority to accommodation details, land size, market condition, construction cost, neighbourhood facilities and location. Less than 50% of property owners indicate that they consider many of the external or internal attributes of the property.

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The estate agents were requested to provide information on the status, location of properties in sales portfolio as well as the listing period in the last three years, between 2014 and 2016. The number of transactions concluded within this period was also indicated. This is presented in Table 3.

Table 3: Housing Listing and Sales Transactions between 2012 and 2016

Listing/brief mode	2012 – 2013	2013 - 2014	2014 - 2015	2015 – 2016
new listing	315	563	206	331
carried over listing	165	330	581	443
closed listing	115	245	302	263
dropped/withdrawn listing	35	67	42	101
outstanding listing	330	581	443	410
carried over listing (%)	34.4%	37.0%	73.8%	57.2%

A cursory look at the analysis in Table 3 reveal a gradual increase in carried over listing until the last year which obviously was due to a spike in the number of dropped or withdrawn listing. The number of closed or concluded transaction also increased but decline between 2015 and 2016. The increasing trend of carried over listing indicates that there is challenge somewhere with the supply sector of the housing market. Furthermore, the trend of brief dropped or withdrawn from listing also indicates that those properties could not meet demand/buyers expectations within the listing period compelling the owners to change their mind about the agent or about the sale. Subsequently, the opinions of the agents were sought about the possible challenges that prolong the listing period and eventual withdrawal of some from the market. Presented in Table 4 is the analysis of response of the agents.

Table 4: Factors that prolong the listing period of some properties

Factors	Estate Valuers		Developers	
	Mean score	Rank	Mean score	Rank
Overpricing	3.8592	1st	3.4016	2nd
Location	2.1136	6th	2.3219	7th
Design	2.4577	4th	2.9010	4th
Resale	3.1091	2nd	3.4521	1st
Structural defect	2.2058	5th	2.6059	6th
Legal constraint	1.6843	8th	2.2245	8th
Insufficient market exposure	1.4672	10th	1.8012	10th
Size	1.5638	9th	1.9562	9th
Adaptability/Ease of conversion	1.9310	7th	3.2110	3rd
Economic condition	2.7031	3rd	2.7443	5th

The challenges are tabulated and the mean score on the 5-Point likert scale of the significance of these factors were calculated and ranked. It is observed that over-pricing ranked first with a mean score of 3.8592 followed by economic condition, design and structural defect ranking 2nd, 3rd and 4th respectively. The ranking of overpricing which incidentally is the highest with a wide margin indicate clearly that price mismatch constitutes a significant threat to quick disposal in the housing market. This also attest to the fact that the pricing strategy of property owners who are the sellers is based on lack of understanding of the dynamics of the market, incomplete information about the market or about the property in question. It had been established in Table 2 that most prospective sellers do not consider many of the determining factors when fixing the price of their housing properties in the market. This result also indicates that oftentimes, agents are incapacitated from fixing or advising the price that would ensure relatively quick disposal of the property in the market. The response of the developers on the other hand ranked resale 1st among the factors prolonging listing period of properties in the housing market. This is followed by overpricing, adaptability, design and economic condition which ranked 2nd, 3rd, 4th and 5th respectively. The developers further explained from the interview granted them that many properties in the housing market experiencing prolonged listing are due to two principal factors, resale and overpricing. Some of these sellers invested in the estates and are at ease waiting for the right time and "right pricing" and not willing to compromise on their price.

4.0 Conclusion and Recommendation

Facilitating transaction in the property market, especially the housing market is the key objective of this study. Determinants of housing prices have been examined from the perspective of the agents and the sellers. The trend of transaction on listed properties was also examined and finally the factors prolonging the listing period of listed houses in the residential property market. Findings have shown that the professional property practitioners engaged as agents to sell the properties, despite their deeper knowledge of property and property market dynamics, are forced to work with the price expectation of the owner. This clearly suggest lack of trust in the ability and capacity of the agent to advise on price that will be acceptable to the client. This however has often led to prolonged listing of such property. Moreover, analyzing the factors that cause prolonged listing, the ranking of overpricing, resale, economic condition, design and adaptability among the top five factors necessitate more involvement of professional property valuers in the pricing, marketing and sales of these properties. This is because they are in a better position to educate their client on the impact of these factors as well as other factors that could hinder quick sale. The study therefore recommends that sellers undertake the valuation of their property before putting it in the market for sale or let as most of these items would have been taken care of in the valuation, thereby making the seller to be better informed in the pricing of the property.

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