



Factors Influencing Off-Plan Real Estate Investment in the Lekki-Ajah Axis of Lagos State

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Abstract

This paper aims to investigate those factors influencing off-plan real estate investment strategy with a view to proffering solutions to the hindrances of the strategy. Structured questionnaires were used to obtain expert opinions on the questions raised in the study. Opinionated data were analysed using frequency, mean, standard deviation, and relative importance index. The study revealed that options to spread payments (0.88), purchasing at a lower price than finished properties (0.87), the benefit of selling at a higher price upon delivery (0.80), and the chance to select units before or during construction (0.79) were significant drivers of off-plan real estate investment. The study recommends the following: developers should divide their projects into proportions and only sell off-plan after completing the preceding proportion, use of independent project manager who represents, monitors, and reports to investors directly, a law regulating off-plan sales and investment, the provision of a 'loss of deposit' insurance cover to off-plan investors to ensure that their deposits are fully refunded in the case of the developer insolvency or negligence.

Keywords: *development, investment, off-plan, real estate*

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Introduction

The urban population in Lagos State, Africa's second most populous metropolis, has been growing exponentially. The continuous increase in population demands a corresponding increase in housing to serve the population. The government's failure to sufficiently address this demand has resulted in housing shortfalls of approximately 2.5 million in the state (Oyalowo, Muraina, Nubi, Ohiro, Oshodi & Gold, 2023). These shortfalls can be taken care of through necessitates a collaborative endeavour to do so, between the government and private developers. No doubt, the contributions of real estate developers in providing housing in the state are significant. In the same accord, Enisan and Ogundiran (2013) and Ogunbayo, Alagbe, Ajao, and Ogundipe (2016) highlighted that private developers are responsible for 65 to 90 percent of housing units in Nigeria's urban areas. However, the substantial financial resources required to solve the problem of the housing shortfalls have resulted in developers exploring the option of obtaining development funds through various sources. These sources include Joint Ventures, Equity and Debt Financing, off-plan sales or leases, Advance Payment of key money (off-plan), and Sale of Securities (Ezimuo, Onyejiaka & Emoh, 2014).

Comparatively, off-plan real estate arrangements are cheaper, making them viable sources of liquidity for property developers. This conclusion aligns with Kimaru's (2018) position that off-plan sales have been proven to be an effective method of financing real estate. The benefits derived from off-plan arrangements constitute a significant drive for investors' adoption. Moreover, Cytonn (2022) posited that purchasing a house off-plan is an ideal way to acquire a property at a lower price than its actual market value, making it a great investment option. Other benefits of this arrangement include payment flexibility, design modification, and high capital appreciation (Cytonn, 2022).

Off-plan real estate investment in Lagos is a high-risk but high-return

venture where investors buy into projects before completion, hoping to benefit from lower prices and potential long-term appreciation after completion (Cytonn, 2022). However, numerous challenges plague this market, including project delays and cancellations, unclear regulatory frameworks, market volatility, lack of transparency and trust, difficulty accessing finance, high upfront costs, risk of project abandonment, collapse, and limited investor protection. These challenges resulted in reduced investor confidence, decreased demand for off-plan projects, stalled developments, economic losses for investors and developers, and missed opportunities for housing and economic growth (Kimaru, 2018; Katwa & Obala, 2023). Two (2) examples of off-plan projects in Lagos state with some of the identified issues are the collapsed 21-storey high-rise luxury residential building and the Lekki Garden Estate Phase 2. On 1st November 2021, a 21-storey high-rise luxury residential building in Lagos collapsed, marking a significant event in the state's real estate market. The project was already 65 percent sold out at the time of the collapse, with apartment prices ranging from 1.2 million USD to 5 million USD per unit. It was reported that the collapse was due to an increase in the number of floors against the government-approved number, the implication being a loss of investment to subscribers (Vanguard News, 2021). Furthermore, Channels Television (2021) reported that residents of Lekki Gardens Estate Phase 2, Ajah protested, calling on the project developer to rectify the estate infrastructure as residents battle with flooding and surface seepage of faeces. This is a case of poor construction quality and incomplete infrastructure provision. Lekki Garden Phase 2 is also a product of the off-plan strategy.

These merits and demerits of the off-plan approach form the basis of investment decisions. Hence, this paper explores the factors driving and hindering off-plan real estate investment in Lagos, focusing on the Lekki-Ajah axis of the state, with a view to proffering solutions to the identified factors hindering off-plan real estate investment in the study area. To achieve this

purpose, the study ascertained the prevalence of off-plan sales in the study area; assessed the factors influencing off-plan real estate investment in the study area; and examined the factors hindering off-plan real estate investment in the study area. The results were expected to provide valuable insights to investors, developers, policymakers, and other stakeholders in the real estate industry, which is to help them make informed investment decisions, devise effective strategies, and create an environment conducive to sustainable and responsible off-plan real estate investment.

Literature Review

Off-plan, a common approach in property development, varies in name depending on the region. In Nigeria, it is called off-plan (Olayiwole, 2023); in Australia, it is off-the-plan (Reid Wilson, Pocock, Hsaio, Caldera, Roca & Liu, 2020). Moreover, Taiwan refers to it as presale housing (Juan, Chien & Li, 2010; Juan, Lin & Tsai, 2019), while in Malaysia, it is sell-then-build (Fauzi, Yusof & Osmadi, 2011). Li and Chau (2019) defined off-plan sales as a developer selling a residential unit before completion or sometimes before construction begins. Mwaita and Rambo (2020) note that buyers can make decisions based on plans, maps, computer-generated images, or virtual reality tools.

According to Li et al. (2019), the off-plan strategy began in 1954 due to rising real estate demand and limited land, which pushed developers to build high-rises and large housing estates. This requires significant upfront capital, making off-plan sales attractive for securing funds. Li et al. (2019) attribute the market's long-term strength to strong institutional guarantees for builders and buyers. Leung, Hui, and Seabrooke (2007a) observed that condominium developers often sell properties off-plan in the United States, and they need to sell up to 40% before lenders finance construction. Buyers can secure an unfinished property with a 5% deposit, paying the balance upon project completion (5:95 system) or according to the development schedule (progress

payment method). This practice is also found in Canada and Australia, where Australia requires a 10% deposit (Buang, 2006).

In China, the timing of capital for developers differentiates the off-plan sale mechanism from other markets. The presale approach requires customers to pay 100% upfront before project completion (Leung et al., 2007a). According to Zhou, Zahirovic-herbert, Gilber, (2018), payment can be made in cash or with a down payment of at least 30% plus mortgage funds, exposing customers to significant risk. If presales underperform, failing to cover financing costs, the project will likely default, resulting in buyers losing their invested money. Even with a partly mortgaged payment, buyers still bear all risks, as they remain liable for the mortgage if the developer abandons the project. However, there are benefits of off-plan real estate sales to both developers and buyers. This study focuses on the benefits to the buyers or investors.

Leung, Hui, and Seabrooke (2007a) define this benefit for homebuyers and property investors as "anticipatory hedging," which means that the buyer can take advantage of the present price against any anticipated price appreciation of properties in the future, especially when a booming market is expected. Furthermore, because they are typically low deposits used to ensure future ownership of housing units, off-plan selling payment arrangements assist buyers in overcoming initial payment constraints. Off-plan properties can also provide more options for home buyers and investors looking for their ideal dwellings/investments regarding location and features that may be in limited supply in the spot market. Furthermore, buyers can contribute to the design depending on the purchase time. This is backed by Juan et al. (2019), who argue that because developers sell units before they are built, it provides an excellent chance to redesign the home to meet the needs of the individual before construction. The authors advocate for a customer-focused concept, which implies that customers have evolved from passive value acceptors to active value co-creators.

Another benefit, though discouraged in some markets due to the impact on genuine house buyers, is the advantage of short-term speculation. Speculators typically use presale payment arrangements to construct highly geared options or forward contracts with the expectation of profitably reselling the properties before completion (Li et.al, 2019). According to Wong, Yiu, Tse, and Chau (2006), trading such contracts before completion is feasible because buyers are typically regarded as equitable owners in the title, allowing the forward contract to trade easily in the market. Moreover, as seen in markets like Taiwan, the off-plan sale is more appealing to speculators because there is no liability for transaction tax, i.e., capital gains tax, before the property is completed. After all, the property has not yet been listed on the official property registration (Chang & Ward, 1993). All these benefits of off-plan sales make it appealing to real estate buyers or investors to adopt the investment strategy. However, barriers have been identified to the adoption of the strategy.

Even though developers increasingly embrace off-plan real estate as a financing strategy, several barriers hinder its adoption, particularly in emerging and less-regulated markets. Legal and institutional frameworks to protect buyers and ensure project completion heighten investor risk and limit market confidence (Katwa & Obala, 2023). Uncertainty about market behaviour, changes in property values and tenant risks, underdeveloped credit systems, and weak regulatory oversight further discourage investment (Pires, Ferreira, Jalali & Chang, 2018). In developing economies, these issues are compounded by informal market dynamics and a lack of transparency, creating an uneven playing field for investors, which inflates perceived risks (Baum & Murray, 2010).

According to Gardner (2003), investment decisions are analogous to a game in which the players are placed in a rule-governed situation with defined outcomes, characterised by strategic interdependence between the game players. The importance of information available to the players in a

game makes a big difference in the outcome. If the information is biased toward some players, then the game would be unfair to those who do not possess the information. Generally, information is not symmetrically accessible and available to all actors in a market, and most of the time, the sellers or producers have far more information about what they are selling than the buyers (Hayes, 2022). Information asymmetry characterises all real estate markets, but the nature of the off-plan process exacerbates it. Developers, by definition, have more excellent knowledge about the property, its quality, and its likelihood of completion than potential house buyers. The developer does not share this knowledge about the project's financial stability and construction with prospective buyers. This information asymmetry can lead to market inefficiencies via what is known as adverse selection, putting the buyer at a disadvantage due to a lack of information. This disadvantage mostly manifests in supplying lemons to the buyer (Akerlof, 1970). This means the buyers are offered faulty, defective properties, or poor-quality construction when completed. However, Zhou et al. (2018) posit that as the project progresses, information asymmetry is reduced as the physical construction of the building reduces the developer's default risk.

Given this, the principal-agent relationship created during the execution of an off-plan sale contract is unique. One has an inherent asymmetric information problem as the agent knows more about the situation than the principal. The buyer of the uncompleted property relies on the developer to finish the construction work. This lack of knowledge and technical expertise in the construction work, therefore, makes the principal unsure of whether his agent serves his best interest in terms of the quality of the work and the timely completion of construction after the agent has collected the money (Farrell, 2003). According to Leung et al. (2007a), this is typically a moral hazard problem. A moral hazard is said to arise when the actions of one party (the agent) are not observable but are pertinent to the other (the principal) (Ong, 1997). As Holstrom (1979) pointed out, the actions taken by agents are

not directly observable, and therefore complete monitoring is not generally possible. It is, therefore, not uncommon that problems such as the inaccurate size of the properties and mismatch of fittings and finishes were found when presale buyers collected their properties upon completion. Aside from the risks imposed on buyers due to asymmetric information, a study by Leung et al. (2007a) further revealed that developers had imposed extra profit on off-plan property prices in the off-plan market.

Ong (1997) supported this moral hazard problem with a model of effort disutility, which deduced that building defects are accentuated by marketing property projects before the completion of construction. Gwin & Ong (2000) further proposed a game-theoretic model, which shows that even defect warranties are of limited use to tackle moral hazard. The heterogeneous and latent features of housing are factors in the moral hazard that hinder the standardisation of real estate and make it prohibitively costly to specify the required quality in a forward contract completely. This difficulty of being standardised makes them more susceptible to moral hazard. Also, going by the models of Ong (1997) and Gwin and Ong (2000), if the quality of pre-sale units is necessarily poorer than expected by buyers, then buyers would adjust their expectations (and thus the price) downward, and so would developers lower the housing quality further. The process repeats, and all pre-sale units eventually reach the minimal quality level (e.g., the minimum requirements imposed by the legislation or the maximum protection provided by warranties), giving rise to the adverse selection problem analysed (Akerlof, 1970). This suggests that forward contracts hardly exist in real estate; however, the prevalence of the off-plan system in major markets globally suggests otherwise.

The continued sustenance of the off-plan system, according to Yui (2008), is due to certain forces counteracting the moral hazard problem. Yui (2008) posited that the goodwill of a developer is valuable and thus counteracts moral hazard intents. This is supported by Shapiro's (1982) idea that

reputation can prevent quality deterioration induced by moral hazard. When consumers find it challenging to observe product attributes before making a purchase, they may reasonably rely on the quality of products previously produced by the firm to gauge current or future quality. In such situations, a firm's commitment to producing high-quality items is a dynamic process: the advantages of this decision manifest over time through establishing a strong reputation (Shapiro, 1982). Reputation is thus an effective signal for quality information because it is firm-specific. It is gradually built up from the quality of the projects a developer has done in the past. This encourages developers engaged in real estate development to offer quality housing that meets buyers' expectations rather than providing subpar options (Chau et al., 2005). This shows a significant limitation in the two-stage model proposed by Ong (1997) as they did not incorporate the past and future performance of the firm; their model also neglects the effect of goodwill on the price of property with uncertain quality at the time of pre-sale. Since real estate development is a very capital-intensive business, it is unrealistic to assume that developers aim for just one period of sale only. A more natural ongoing assumption is that the developer will continue his business infinitely, and his objective is to maximise the sum of his infinite number of all his current and future projects rather than just the current one.

Deductively, it can be said that the market efficiently adjusts the off-plan for the potential quality problem based on developers' reputations. This means that buyers typically learn from their successes or mistakes in repeated games or transactions, as suggested by Axelrod's Iterated Prisoner's Dilemma model (Zhou et al., 2018). Leung (2010), however, further suggests licensing and guarantees through government intervention to control product quality. In conclusion, by weighing the benefits gained and corresponding risks borne, it is apparent that an off-plan property contract has put developers in a more advantageous situation than the buyers. It enables them to transfer part of their project risks to other parties without incurring any loss, and can

provide an opportunity to help them earn an abnormal return. On the other hand, off-plan property buyers must weigh the benefits against the additional risks incurred before deciding.

Methodology

This study investigated the factors influencing off-plan real estate investment in the Lekki-Ajah axis of Lagos State. Data were obtained through questionnaires administered to Estate Surveyors and Valuers working in Estate Surveying firms in Lagos. According to the Directory of the Estate Surveyors and Valuers Registration Board of Nigeria (ESVARBON) as of 2024, 430 registered Estate Surveying and Valuation Firms are in Lagos. Hence, the study population is 430 registered Estate Surveyors and Valuers in the Estate Surveying and Valuation Firms. That is, one Estate Surveyor and Valuer per firm. The sample size was determined using Cochran's (1977) sample size formula, taking an acceptable margin of error (d) of 0.05, an alpha level of 0.05, a population proportion (P) of 0.5, and a total population size (N). The sample size for the 430 Estate Surveyors and Valuers is 203. A probabilistic simple random sampling technique was used to determine the respondents for questionnaire distribution.

The questionnaires for this research consist of closed-ended and Likert-scale questions, which were used to obtain data on the factors influencing off-plan real estate investment in the Lekki-Ajah Axis of Lagos State. They were administered online on the Google Forms platform. Data obtained were processed using Statistical Package for Social Sciences (SPSS), version 20.0. Data measured on a nominal scale were analysed using frequency distribution and percentages. Mean, Standard Deviation, and Relative Importance Index (RII) were used to analyse data measured on an ordinal scale. The levels of importance of identified factors were determined by the magnitude of their RII, with the highest representing the most important factor.

In setting the decision rule for identifying the drivers, barriers, and possible solutions to the hindrances of off-plan real estate investment in the Lekki-Ajah axis of Lagos state, the RII figure was classified into two groups of 'accept' and 'reject' as shown in Table 1. In this analysis, the highest RII across all tables was 0.8809, and the lowest was 0.6147. The range of the RII was 0.2662 (0.8809 - 0.6147). When 0.2662 was divided by 5, the result was 0.05324. For each scale of the index, 0.05324 was added, starting from the lowest RII score. The decision rule was that only factors with RII scores within the Strongly Agree and Agree range were considered significant drivers, hindrances, and possible solutions to the identified barriers. This type of decision rule was used by Atilola et.al (2019).

Table 1: Relative importance index decision rule

Scale of Index	Range of Index	Decision Rule
Strongly Disagree	0.6147 to 0.6679	Reject
Disagree	0.6680 to 0.7212	Reject
Neutral	0.7213 to 0.7745	Reject
Agree	0.7746 to 0.8278	Accept
Strongly Agree	0.8279 to 0.8811	Accept

Results and Discussion

From the 203 questionnaires administered to the respondents, 183 were returned. The data from the garnered responses are presented as follows.

Table 2: Background information of respondents

	Frequency	Percentage
Gender		
Male	138	75.4
Female	45	24.6
Total	183	100.0

Highest educational qualifications

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in the Lekki-Ajah, Lagos, Nigeria

	Frequency	Percentage
HND	39	21.3
BSc	78	42.6
MSc	51	27.9
Others	15	8.2
Total	183	100.0
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Years in Practice		
0-5 years	72	39.3
6-10years	44	24.0
11-15 years	8	4.4
16-20 years	40	21.9
21 years-above	19	10.4
Total	183	100.0
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Have you ever brokered an off-plan real estate transaction?		
Yes	145	79.2
No	38	20.8
Total	183	100
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If yes, on what type of property did you transact?		
Bungalow	9	6.2
Apartment/Flat	35	24.1
Terraced House	70	48.3
Detached House	4	2.8
Semidetached House	27	18.6
Total	145	100.0

Table 2 indicates that 75.4% of the respondents were male, while 24.6% were female. This implies that most of the respondents in the study were male. The table also reveals that 42.6% of the respondents were BSc holders, 21.3% were HND holders, 27.9% were MSC holders, and 8.2% had other qualifications. This further implies that the majority of the respondents were BSc holders.

The table reveals that 39.3% of the respondents had a work experience of 0-5 years, 24% had a work experience of 6-10 years, 4.4% had a work experience of 11-15 years, 21.9% had a work experience of 16-20 years while 10.4% had a work experience of 21 years & above. This indicates that most respondents had 0-5 years of work experience.

Table 2 also shows that 79.2% of the respondents had previously brokered an off-plan real estate transaction, while 20.8% had not. This indicates that most respondents had previously brokered an off-plan real estate transaction. The table also shows that 6.2% of the respondents had brokered an off-plan transaction involving the sale of a Bungalow, 24.1% had brokered an off-plan transaction involving the sale of an Apartment/Flat, 48.3% had brokered a transaction involving the sale of a Terraced House, 2.8% had brokered a transaction involving the sale of a Detached house, 18.6% had brokered a transaction involving the sale of a Semi-Detached house. This shows that most respondents had brokered off-plan transactions involving various properties, with terraced houses being the most common.

Table 3: Factors that drive off-plan real estate investment

Drivers	Mean	Std.Dev	Rll	Rank	Decision
Option to spread payment	4.4	0.714	0.880882	1st	Accept
Buying at a lower price than the price of finished properties	4.32	0.885	0.864706	2nd	Accept
Advantage of selling at a higher price on delivery (speculation)	4.01	0.852	0.802941	3rd	Accept
Opportunity to select unit before or during construction	3.93	0.772	0.786765	4th	Accept
Opportunity to buy a property in a choice location	3.61	0.967	0.722059	5th	Reject
Opportunity to contribute to the design	3.6	1.006	0.719118	6th	Reject
Opportunity to monitor the project from start to finish	3.58	0.939	0.716176	7th	Reject

Table 3 reveals that option to spread payment, buying at a lower price than the price of finished properties, and the advantage of selling at a higher price on delivery (speculation) were strongly agreed drivers of off-plan real estate investment by falling within the RII range index of 0.8279 to 0.8811. Furthermore, the opportunity to select a unit before or during construction was agreed to be a driver, having fallen within the RII range index of 0.7746 to 0.8278. At the same time, respondents were neutral about the opportunity to select a unit before or during construction, with an RII range index of 0.7213 to 0.7745. Nonetheless, respondents disagreed that the opportunity to contribute to design and monitor the project from start to finish was a driver. Hence, based on the decision rule, the analysis showed that respondents accept the option to spread payment, buying at a lower price to finished properties, advantage of selling at a higher price on delivery (speculation) and opportunity to select units before or during construction as the major drivers of off-plan real estate investment.

Table 4: Hindrance to off-plan real estate investment

Hindrance	Mean	Std.Dev	RII	Rank	Decision
Delay in delivery	4.3	0.863	0.860294	1st	Accept
Loss of invested funds due to unscrupulous acts of the developer (e.g., paper allocation without a subsequent physical allocation of units, overselling of the Project etc.)	4.17	0.882	0.833824	2nd	Accept
Loss of capital growth in the event of a refund	4.05	0.792	0.810294	3rd	Accept
Loss of investment in the event of construction collapse	4.02	0.906	0.804412	4th	Accept
Abandonment of project by developer	3.96	0.999	0.792647	5th	Accept
Likely reduction in building specification (e.g, lesser living room size than as advertised)	3.74	0.937	0.747059	6th	Reject

Hindrance	Mean	Std.Dev	RII	Rank	Decision
Low construction quality / Building defect	3.72	0.916	0.744118	7th	Reject
Use of substandard building materials	3.49	0.927	0.698529	8th	Reject
Mismatches of fixtures and fittings (in comparison to what was advertised)	3.49	0.911	0.697059	9th	Reject
Change of investor's preferred unit by the developer	3.32	0.885	0.664706	11th	Reject
Change of preferred project location due to unforeseen construction challenges	3.07	1.221	0.614706	12th	Reject

Table 4 reveals that delay in delivery and loss of invested funds due to unscrupulous acts of the developer (e.g., paper allocation without subsequent physical allocation of units, overselling of the project, etc.) were strongly agreed barriers to off-plan real estate investment with the RII range index of 0.8279 to 0.8811. Furthermore, Loss of rent in the event of delayed delivery, loss of capital growth in the event of a refund, loss of investment in the event of construction collapse, and abandonment of the project by the developer are factors agreed to be barriers to off-plan real estate investment with an RII range index of 0.7746 to 0.8278. Nonetheless, respondents were neutral about a likely reduction in building specification (e.g., lesser living room size than advertised) and low construction quality/Building defect with an RII range index of 0.7213 to 0.7745. On the other hand, the use of substandard building materials, mismatches of fixtures and fittings, reduced number of facilities, and change of investor's preferred unit by the developer were considered to be a lesser barrier, having fallen within the RII range index of 0.6680 to 0.7212. In contrast, a change of preferred project location due to unforeseen construction challenges was strongly disagreed upon as a barrier, as it falls within the RII range index of 0.6147 to 0.6679. Hence, based on the decision

rule, delay in delivery, loss of invested funds due to unscrupulous acts of the developer, loss of rent in the event of delayed delivery, loss of capital growth in the event of a refund, and abandonment of the project by the developer, Loss of investment in the event of construction collapse were revealed to be the main barriers to off-plan real estate investment.

Table 5: Possible solutions to the hindrances highlighted

Possible Solutions	Mean	Std.Dev	Rll	Rank	Decision
Developers should divide their projects into proportions and only sell off-plan after completing the preceding proportions. (e.g dividing a 100-unit project into 30-30-40, the second 30 units can only be sold on the completion of the first)	4.26	0.834	0.8515	1st	Accept
In Nigeria, a law regulating off-plan sales and investments should be adopted	4.22	0.805	0.8441	2nd	Accept
A developer should always provide customers with 'loss of deposit' insurance to ensure that their deposits are fully refunded in the case of the developer's insolvency or negligence	4.21	0.724	0.8426	3rd	Accept
The defect liability period for off-plan projects should be extended to one year, and a legislative framework to ensure its implementation should be established	4.01	1.004	0.8029	4th	Accept
Middlemen such as bankers and lawyers should hold funds paid by home buyers and release them to developers as development progresses	3.74	0.903	0.7485	5th	Reject

Table 5 reveals that initiatives such as developers dividing their projects into proportions and only selling off-plan after completing the preceding proportion (e.g., dividing a 100-unit project into 30-30-40, the second 30 units can only be sold on the completion of the first), Use of independent project manager who represents, monitors, and reports to investors directly, a law regulating off-plan sales and investment should be adopted, the provision of a 'loss of deposit' insurance cover to off-plan investors to ensure that their deposits are fully refunded in the case of the developer insolvency or negligence were strongly agreed to be possible solutions to the highlighted hindrances in Table 4 after falling within the RII range index of 0.8279 to 0.8811. Furthermore, respondents agreed that the defect liability period for off-plan projects should be extended to one year & a legislative framework to assure its implementation should be put in place as this initiative falls within the RII index range of 0.7746 to 0.8278, while they were neutral about Middlemen such as bankers and lawyers holding funds paid by home buyers and releasing them to developers as development progresses as this initiative falls within an RII range index of 0.7213 to 0.7745. Hence, based on the decision rule, Table 5 reveals that respondents accept and strongly recommend every initiative set out in the table as a possible solution to the barriers highlighted in the study, except for the idea of using middlemen such as bankers and lawyers to hold funds paid by home buyers and release them to developers as development progresses.

Discussion of Findings

This paper's findings show that the option to spread payment, buying at a lower price than finished properties, the advantage of selling at a higher price on delivery (speculation), and the opportunity to select a unit before or during construction are the highest drivers of off-plan. These findings are in tandem with the individual findings of Li et al. (2019) and Leung et al. (2007). However, Juan et al. (2019) argue that investors emphasise design

contribution, but it has little influence in the Lekki-Ajah real estate market of Lagos State.

Moreover, Chau et al. (2005) observed that low construction quality and building defects are the main barriers to adopting the off-plan strategy. This study found that in the Lekki-Ajah market, investors in the off-plan market are more concerned with the danger of losing their capital than with building-specific risks (expected reduction in building standard, mismatch of fixtures and fittings, lower number of amenities, etc.). Risks of significant importance to the Lekki-Ajah investor include delays in delivery, loss of invested funds due to unscrupulous acts of the developer (e.g., paper allocation without a subsequent physical allocation of units, overselling of the project, etc.), loss of capital growth in the event of a refund, abandonment of the project by the developer, and loss of investment in the event of construction collapse. In the context of this study, investors prioritise financial risks (security of investment) more than construction quality.

Conclusion

Based on the findings, the study concludes that there are significant and insignificant drivers and hinderances to adopting off-plan real estate investments. To ensure the sustenance of the strategy as a property development and investment strategy, maximum attention must be paid to these drivers, and the barriers actively eliminated. The developers may increase subscriptions by adopting marketing strategies that illustrate the benefits of off-plan investments. In addition, developers need to engage in comprehensive feasibility and viability appraisal of the project before venturing into them to identify the likely risk factors that may affect the delivery of the project. This will help avert delay in delivery, abandonment of the project, and their resultant effects. Furthermore, to increase the adoption of off-plan, the following initiatives should be introduced: developers should divide their projects into proportions and only sell off-plan after completing

the preceding proportion, use of independent project manager who represents, monitors, and reports to investors directly, a law regulating off-plan sales and investment, the provision of a 'loss of deposit' insurance cover to off-plan investors to ensure that their deposits are fully refunded in the case of the developer insolvency or negligence.

REFERENCES

- Akerlof, G. (1970). The market for lemons. *Quarterly Journal of Economics*, 84, 488-500.
- Buang, S. (2006). Housing heartaches. *Property Malaysia*.
- Baum, A. & Murray, C. (2010). *Understanding the barriers to real estate investment in developing economies*. <https://doi.org/10.15396/LARES-2010-ARTIGO-314-412-1-RV>
- Chang, C., Ward, W.R. (1993). Forward pricing and the housing market: The presales housing system in Taiwan. *Journal of Property Research*, 10(3), 217-227.
- Chau, K.W., Wong, S.K. & Yiu, C.Y. (2005). Housing quality in the forward contracts market. *Journal of Real Estate and Economics*. <https://doi.org/10.1007/s11146-007-9018-x>
- Cytonn Investments (2022). Off-plan Real estate investing. Cytonn Weekly #02/2022. Cytonn Investments
- Enisan, O. & Ogundiran, A. (2013). Challenges of housing delivery in metropolitan Lagos. *Research on Humanities and Social Sciences*, 3(20)1-6.
- Ezimuo P.N, Onyejiaka C.J & 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.
- Fauzi, S.N.F., Yusof, N. & Osmadi, A. (2011). Comparing the level of housing defects in Sell-Then-Build (STB) and Build-Then-Sell (BTS) housing. *World Applied Sciences Journal*, 12(4), 559-567.
- Gardener, R. (2003). *Games for Business and Economics*, Ley Publishing.
- Gwin, C.R. & Ong, S.E. (2000). Homeowner warranties and building codes. *Journal of Property Investment & Finance*, 18(4), 456-472.

- Hayes, A. (2022). Investopedia. Adverse Selection: Definition, How it works, and the lemons problem. <https://tinyurl.com/5pcnkc9h>
- Holstrom, B. (1979). Moral hazard and observability. *The Bell Journal of Economics*, 10(1), 74-91.
- Juan, Y., Chien, S. & Li, Y. (2010). Customer focused system for pre-sale housing customisation using Case-based Reasoning and Feng Shui Theory. *Indoor and Built Environment*, 19(4), 453-464. <https://doi.org/10.1177/1420326X10372198>
- Juan, Y., Lin, I. & Tsai, J. (2019). A hybrid approach to optimize initial design strategies for pre-sale housing projects. *Engineering, Construction and Architectural Management*, 26(3), 515-534. <https://doi.org/10.1108/ECAM-04-2018-0187>
- Katwa, K. K. & Obala, L. M. (2023). Off-plan property sales as an innovative financing option in real estate development. *Business & IT*, XIII(1), 110–120. <https://doi.org/10.14311/bit.2023.01.13>
- Kimaru, K. K. (2018). *The effectiveness of financing real estate development through off-plan sales: Case study of selected residential developments within Nairobi County* (Doctoral dissertation, University of Nairobi).
- Leung, B.Y.P., Hui, E.C.M. & Seabrooke, B. (2007). Pricing of presale properties with asymmetric information problems. *Journal of Real Estate Portfolio Management*, 13(2), 139-152. <https://doi.org/10.1080/10835547.2007.12089768>
- Leung, B.Y.P., Hui, E.C.M. & Seabrooke, B. (2007). Asymmetric information in the Hong Kong forward property market. *International Journal of Strategic Property Management*, 11, 91-106.
- Leung, B.Y.P. (2010). Wealth transfer in forward property markets. *International Journal of Strategic Property Management*, 14(3), 258-270. <https://doi.org/10.3846/ijspm.2010.19>
- Li, L. & Chau, K.W. (2019). What motivates a developer to sell before completion. *Journal of Real Estate Finance & Economics*, 59, 209-232. <https://doi.org/10.1007/s11146-018-9662-3>
- Mwaita, S.S. & Rambo, C. (2020). Influence of off-plan purchases and sales on performance of real estate development projects in Kilmani, Westlands Sub-county, Nairobi County, Kenya. *International Journal of Recent Innovations in Academic Research*, 4(10), 18-27.

- Ogunbayo, B.F., Alagbe, O.A., Ajao, A.M. & Ogundipe, E.K. (2016). Determining the individual significant contribution of public and private sector in housing delivery in Nigeria. *British Journal of Earth Sciences Research*, 4(3), 16-26.
- Olayiwola, F. E. (2023). Pre-letting and pre-sale financing arrangements: An assessment of cost effectiveness for real estate development in Lagos Metropolis, Nigeria. *British Journal of Earth Sciences Research*, 11(5), 15-26.
- Ong, S.E. (1997). Building defects, warranties and project financing from pre-completion marketing. *Journal of Property Finance*, 8(1), 35-51.
<http://dx.doi.org/10.1108/09588689710160507>
- Oyalowo B, Muraina O, Nubi T.G., Ohiro Y, Oshodi B. & Gold R. (2023). Exploring the market for home improvement financing in urban areas. *Informality and Inequality in Urban Africa*.
- Pires, A. S. C., Ferreira, F., Jalali, M. & Chang, H.C. (2018). Barriers to real estate investments for residential rental purposes: mapping out the problem. *International Journal of Strategic Property Management*, 22(3), 168–178.
<https://doi.org/10.3846/IJSPM.2018.1541>
- Reid, S., Wilson, T., Pocock, M., Hsaio, A., Caldera, S., Roca, E. & Liu, B. (2020). Information Disclosure & Residential ‘Off the Plan’ Sales Contracts. *Griffith Business School Stage 2&3 Report*.
- Shapiro, C. (1982). Consumer information, product quality, and seller reputation. *Bell Journal of Economics*, 13(1), 20-35.
- Shiyanbola, R.E. & Olaleye A. (2019). An investigation of housing provision strategies adopted by private developers in Lagos, Nigeria. *International Journal of Construction Management*. <https://doi.org/10.1080/15623599.2019.1625849>
- Wong, S.K., Yiu, C.Y., Tse, M.K.S. & Chau, K.W. (2006). Do forward sales of real estate stabilise spot prices? *Journal of Real Estate Finance & Economics*, 32, 289-304.
- Yiu, C.Y. (2008). Why forward sales of housing survive – A theoretical model. SSRN.
<https://ssrn.com/abstract=1268539> .
- Zhou, X., Zahirovic-herbert, V., Gilber, K.M. (2018). Time-on-market in Chinese condominium presales. *International Journal of Strategic Property Management*, 22(3), 191-203.