



Assessing the Incidence, Characteristics and Causes of Economic Obsolescence in Residential Properties— a Case Study of Ibadan Metropolis

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Abstract

The study examines the incidence, characteristics, and drivers of Economic Obsolescence (EO) in the residential property market of Ibadan, Nigeria. Economic obsolescence, unlike physical obsolescence, refers to externally induced depreciation that reduces property performance despite satisfactory physical condition. Ibadan provides a relevant case due to rising vacancy rates and declining rental values across several neighbourhoods. Guided by real estate literature, the study adopted a quantitative approach targeting Estate Surveyors and Valuers (ESVs), who are directly involved in managing and valuing residential properties. Using a non-probability convenience sampling technique, 110 structured questionnaires were administered, and 77 were duly completed, yielding a 70% response rate. The instrument captured respondents' demographic and professional attributes, the incidence and nature of economic obsolescence in their portfolios, and their perceptions of underlying causes. Data were analysed using descriptive statistics, frequency distributions, the Relative Importance Index (RII), and the Criterion Importance Score (CIS). Inferential analysis (ANOVA and LSD post-hoc tests) was conducted to examine perceptual variations among respondents. Findings show that fewer than 20% of properties exhibit each identified EO characteristic. The most prominent characteristics include the collapse of social amenities ($RII = 0.269$), poor road and drainage infrastructure ($RII = 0.253$), and oversupply of similar property types ($RII = 0.247$). Locational disadvantage ranked as the most critical causative factor, followed by insecurity and infrastructural decay. The study recommends coordinated urban renewal, targeted infrastructure upgrades, improved security, and responsive local regulatory frameworks to mitigate economic obsolescence and enhance sustainable housing in Ibadan.

Keywords

Economic Obsolescence, Estate Surveyors and Valuers, Sustainable Property market, Residential Properties, Housing

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1. Introduction

Obsolescence in real estate refers to a form of depreciation that occurs when a property becomes less suitable for its intended use due to physical, functional, economic, or other factors (Iselin & Lemer, 1993). According to the Australian Property Institute (API, 2017), it is the decline in utility, performance, value, or usefulness of a building, object, or product. Over the years, researchers have categorised obsolescence into different forms, including economic (Olajide & Ijagbemi, 2019), functional and technological (Gould, Song & Zhu, 2024), physical (Wilhelmsson & Roos, 2024), legal, locational (Abidoye & Chan, 2017), and social obsolescence (Silva et al., 2022; Diana, 2023). Some scholars however classify economic, physical, and functional obsolescence as the three principal

categories (Reilly, 2012; Reed & Wilkinson, 2008), while others recognise overlaps among types, leading to more complex patterns. Pourebrahimi, Eghbali, and Pereira-Roders (2020), for example, identified 33 types of obsolescence under 10 major categories, with economic and functional types being the most prevalent.

Physical obsolescence arises from deterioration, neglect, or gross mismanagement of property, leading to high repair cost, though curable through timely interventions (Thomsen & Van der Flier, 2011). Functional obsolescence, by contrast, results from outdated design standards, construction methods, or technological systems that no longer meet current user demands or the property's highest and best use.

This can include obsolete amenities, inefficient layouts, or outdated styles (Jamila & Nuhu, 2019). Market un-readiness for sustainable development (Adeyemo & Ajayi, 2025). Functional Obsolescence is sometimes referred to as technological obsolescence, particularly when driven by innovation and technological change.

Economic obsolescence, also known as external obsolescence, is the loss of property value caused by external factors unrelated to the property's physical condition. These may include adverse changes in traffic patterns, the introduction of undesirable facilities such as landfills, prisons, or sewage plants (Abubakar & Jonathan, 2022), market oversupply due to newer alternative or change in user requirements (Buitelaar, Moroni, & De Franco, 2022; Huuhka's, 2014), security challenges, or policy instability. Longhofer (2018) notes that economic obsolescence arises only when the existing structure is not the site's highest and best use; otherwise, the loss in value is attributed to the land. The principal implication of economic obsolescence is diminished property value, which makes it imperative for valuers to understand and accurately assess its impact on investment performance (Grover & Grover, 2015). However, as Abidoye and Chan (2017) observed, valuers may not always possess the local market knowledge or have access to sufficient data to assess this form of depreciation accurately, especially in rapidly changing urban scenarios.

In developing economies like Nigeria, the incidence and causes of economic obsolescence may differ from those in developed markets. The built environment in developing economies is uniquely impacted by unstable markets, informal development patterns, and weak planning regimes, warranting focused academic attention (Akinbogun, Aigbavboa, & Akinbogun 2024). While the multifaceted nature of obsolescence and its varying manifestations across regions seems obvious, the specific patterns, causes, and visible characteristics in Ibadan require empirical verification.

A continuous lack of information on this problem may present itself in unexplainable loss in rental value and inaccurate investment guidance within the local property market. While a proper understanding will align investor perceptions with investment performance. By classifying the observable types and identifying the key causes of economic obsolescence in the study area, the research

contributes to bridging the knowledge gap, enabling more accurate valuation, improved investment decisions, and better-informed urban policy interventions in similar economies.

2. Literature Review

Location remains a primary cause of real estate value. Poor accessibility, adjacency to declining neighbourhoods, and inadequate public services contribute significantly to long-term economic decline (Cheshire & Sheppard, 2017; Bello & Oladokun, 2012). Infrastructure failures such as deficient drainage systems, frequent power outages, and inadequate road networks are widely also recognized as key causes of obsolescence in the context of developing economies (Ajibola, Olaniyan, & Awodiran, 2013). Socioeconomic factors like poverty, crime, and insecurity also negatively impact neighbourhood desirability and, in turn, property performance (Olawande & Omirin, 2017). This clearly demonstrates that economic obsolescence is a multifaceted issue shaped by locational disadvantages, infrastructural decay, socioeconomic pressures, and market imbalances.

In advanced economies, the concept of obsolescence has been well-theorized and supported by empirical research. Studies conducted in North America and Europe emphasize that economic obsolescence is caused by evolving demand, technological advancements, regulatory changes, market oversupply, and shifting tenant preferences (Mansfield, 2000; Warren-Myers, 2012; Devaney & Scofield, 2017). In contrast, in developing countries such as Nigeria, obsolescence is more closely linked to infrastructural deficiencies, weak institutional governance, and socio-economic instability. Scholars have identified unreliable electricity supply, deteriorating roads, flooding, pollution, and ineffective waste management as key contributors to economic obsolescence, as these issues manifest in characteristics like reduction neighbourhood attractiveness and increase property vacancies (Nishani, 2016; Babalola, 2023). Additionally, informal development patterns including unplanned settlements and laxity in enforcement of building codes promote neighbourhood decline and accelerate depreciation (Akinbogun *et al.*, 2024).

Case studies of office buildings in Lagos (AkinAbraham & Associates, 2024) revealed that aging buildings, such as the popular Western House on Broad Street, Lagos Island, have lost more than

59% of their value, primarily due to their inability to meet modern standards, especially energy efficiency requirements. Ijasan and Adeyemo (2024) highlighted that market imbalances, such as the oversupply of uniform property types and unrealistic rent expectations, lead to mismatches between supply and demand, thereby contributing to increased vacancies.

Ibadan, one of Nigeria's largest urban centres, provides a compelling case for examining economic obsolescence. The city is marked by rapid urban sprawl, inadequate infrastructure, and mixed land-use patterns. As Babalola (2023) observes, peri-urban expansion in Ibadan has led to a surplus of housing stock, often failing to meet basic standards of liveability. Despite these concerns, there is limited empirical research quantifying the nature, extent, and types of economic obsolescence in Ibadan. Much of the available evidence remains inferred from broader urban development challenges. This gap underscores the need for targeted research to identify specific forms of obsolescence, nature (characteristics), and their underlying causes.

Addressing this knowledge gap will enhance valuation practices, support better-informed investment decisions, and guide policies aimed at mitigating property decline and promoting sustainable residential property markets. One critical area that remains under-explored is the role of professional experience in shaping perceptions of economic obsolescence. Also understanding whether and how professionals with varying years of experience interpret the causes of obsolescence can reveal important influencing factors in valuation and advisory practices.

This gap forms the basis for the study's central hypothesis: *There is no significant difference in respondents' perceptions of the causes of economic obsolescence based on their years of professional experience.* Testing this hypothesis will not only confirm the presence of economic obsolescence in Ibadan residential property stock but also evaluate how experience levels influence the understanding and interpretation of its underlying causes.

2.1 Conceptual Framework

The conceptual framework provides a structured representation of how various forms of real estate obsolescence, including physical, functional/technological, economic, legal, and locational

emerge from distinct yet interconnected causal factors. It highlights the multidimensional nature of obsolescence by linking locational disadvantages, infrastructural deficiencies, socioeconomic conditions, market dynamics, and regulatory influences to their corresponding manifestations in the built environment. By mapping these relationships, the framework clarifies the pathways through which obsolescence develops and becomes observable in property assets, such as through physical deterioration, functional inadequacy, diminished economic performance, or neighbourhood decline. This depiction supports a holistic understanding of obsolescence, with focus on economic obsolescence and provides a basis for empirical inquiry into its characteristics and determinants within specific urban contexts.

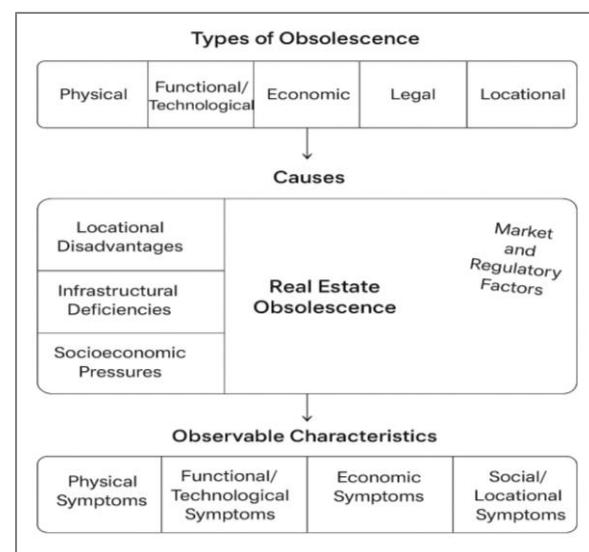


Figure 1: Conceptual Framework of Real Estate Obsolescence: Types, Causes, and Observable Characteristics

Source: Authors' construct (2025), based on reviewed literature

3. Methodology

The study adopted a quantitative research design to examine the incidence, characteristics, and causes of economic obsolescence in the residential property market of Ibadan Metropolis. The design was informed by a review of literature on property obsolescence, with emphasis on distinguishing economic obsolescence from physical deterioration. Ibadan was selected due to observable market challenges, including rising vacancy rates and rental income declines despite properties remaining in good physical condition.

Estate Surveyors and Valuers (ESVs) were identified as the target population because they possess direct, practical knowledge of residential property performance across the city. Given the exploratory nature of the study, a non-probability convenience sampling technique was adopted. A total of 110 structured questionnaires were distributed to ESVs operating in different parts of Ibadan. The instrument collected information on respondents' demographic and professional characteristics, the features of properties perceived to be affected by economic obsolescence, and the factors contributing to declining performance.

To avoid conceptual confusion, the questionnaire opened with a clear definition of economic obsolescence, differentiating it from physical obsolescence. Respondents were also required to indicate the number of properties in their portfolios affected by economic obsolescence, based on the explanation provided. Out of the 110 questionnaires administered, 77 were completed and returned, representing a 70% response rate, which is considered adequate for exploratory empirical studies.

Data analysis comprised descriptive statistical techniques used to summarize respondent characteristics and property attributes. Frequency counts were computed and converted to percentages for easy interpretation. To determine the relative importance of the contributory factors, two analytical tools, the Relative Importance Index (RII) and the Criterion Importance Score (CIS), were employed, enabling a systematic assessment of the most influential drivers of economic obsolescence within the study area.

The RII was calculated using the formula:

$$RII = TWV / (A \times N)$$

Where:

- TWV = Total Weighted Value assigned to each item (based on a 5-point Likert scale),
- A = Highest point on the scale (i.e., 5),
- N = Total number of respondents.

The CIS was calculated as the mean of all computed RII values. Factors with RII values below the CIS were considered to have low significance, while those above it were deemed highly significant in contributing to economic obsolescence. The results of the analysis are presented using tables and figures to allow for clarity and ease of comparison,

with tables providing factor rankings and figures illustrating the relationships between identified causes and observed characteristics of economic obsolescence in the study area.

4. Results and Discussions

This section presents the results of the empirical investigation of the study. It shows the conceptual framework that links literature themes with the study findings, and also highlights the profile of respondents, nature (characteristic) of economic obsolescence, causes, and the statistical tests used to examine differences in perception among ESVs.

4.1 Revised Conceptual Framework linking Literature Themes with Study Findings

This framework integrates insights from literature (Gould, Song & Zhu, 2024; Wilhelmsson & Roos, 2024; Silva et al., 2022; Diana, 2023; Pourebrahimi, Eghbali, and Pereira Roders ,2020; Olajide & Ijagbemi, 2019) with empirical findings from the study area. The left-hand column represents the main categories of obsolescence identified from literature, including physical, functional/technological, economic, locational, and social obsolescence.

The framework links the major types of obsolescence identified in Ibadan to their underlying causes and visible property characteristics. Economic obsolescence emerges as the most dominant category, caused by locational disadvantage, insecurity, poor neighbourhood conditions, infrastructural decay, inadequate accessibility, and unrealistic rent demands. Physical obsolescence relates mainly to poor maintenance, while functional and technological obsolescence stem from population shifts and oversupply of similar properties. Locational obsolescence overlaps with economic factors through weak accessibility and poor location attributes, and social obsolescence ties to insecurity and deteriorating neighbourhood quality. The observable outcomes, such as collapse of social amenities, poor roads and drainage, unreliable electricity supply, unrealistic rents, and high vacancy rates, reflect the combined effects of these factors. Overall, the framework shows how multiple forms of obsolescence interact in Ibadan, creating a complex pattern of decline that aligns with, yet also extends, existing literature

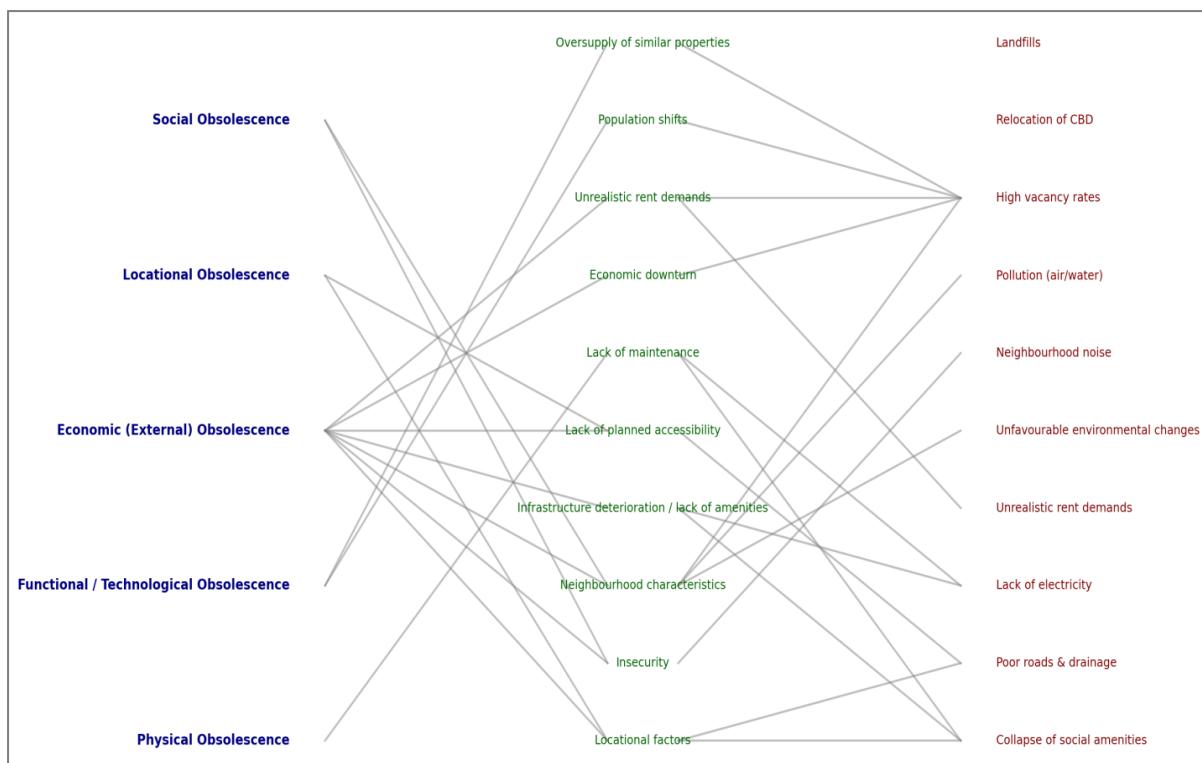


Figure 2: Conceptual framework linking established types of property obsolescence with the causes and observable characteristics of economic obsolescence in Ibadan Metropolis

Source: authors' construct (2025), based on findings

4.1 Profile of Respondents

Table 1 reveals the respondents' years of professional experience which shows that (78%) of Estate Surveyors and Valuers in Ibadan have between (6-21 years) of work experience. This reflects a reasonably high level of professional exposure, suggesting that their responses can be considered reliable. In terms of professional qualifications, a majority (63%) are Associates of the Nigerian Institution of Estate Surveyors and Valuers (NIESV), while 12% are Fellows, indicating that most respondents possess the requisite professional knowledge to provide informed contributions to this study. Furthermore, 45% of the respondents are principal partners or firm owners, a position typically associated with substantial experience and decision-making authority, further strengthening the credibility of the data obtained.

With regards to educational qualification, 73% possess a first degree while 21% possess a Master's degree indicating a high level of literacy to understand the questions and provide valid responses. An observation on the issue of gender reveals that 80% of the respondents were male while 20% were female. It reveals a profession that is currently majorly dominated by males.

Table 1: Respondent's Information

| Item | Freq. | % |
|----------------------------|-------|-----|
| Years of experience | | |
| 1-5yrs | 24 | 28% |
| 6-10yrs | 24 | 28% |
| 11-15yrs | 18 | 21% |
| 16-20yrs | 10 | 12% |
| 21yrs and above | 10 | 12% |
| Professional qualification | | |
| Probationer | 18 | 21% |
| ANIVS | 54 | 63% |
| FNIVS | 10 | 12% |
| Others | 3 | 3% |
| No response | 1 | 1% |
| Designation/Position | | |
| Principal Partner | 39 | 45% |
| Partner | 8 | 9% |
| Head of Department | 12 | 14% |
| Senior Surveyor | 4 | 5% |
| Estate Surveyor | 23 | 27% |
| Age of respondent | | |
| Below 30yrs | 15 | 17% |
| 31-40yrs | 32 | 37% |
| 41-50yrs | 27 | 31% |
| 51-60yrs | 8 | 9% |
| 61yrs and above | 3 | 3% |
| No response | 1 | 1% |
| Educational status | | |
| HND/BSc | 63 | 73% |
| Masters | 18 | 21% |
| PhD | 5 | 6% |
| Gender | | |
| Male | 69 | 80% |
| Female | 17 | 20% |

N = 86

Source: Field Survey (2024)

4.2 Incidence and Characteristics of Economic Obsolescence in Residential Property in the Study Area

Table 2 provides a clearer picture of the extent to which estate surveyors perceive individual residential properties in Ibadan to be affected by each identified obsolescence characteristic. Most responses cluster within the lower score bands, indicating that only a small proportion of properties exhibit each specific issue. For instance, 41 respondents rated the collapse of social amenities within the 1–2 band, implying that they believe only one or two properties out of ten commonly display this condition. Very few placed it in the higher categories, and none believed that up to nine or ten properties are affected.

A similar distribution is observed for inadequate road networks and poor drainage, where 57 respondents placed these characteristics within the 1–2 band. This suggests that although such problems exist across Ibadan, valuers consider them to affect only a limited number of properties within any given neighbourhood. Oversupply of similar property types and lack of electricity also show higher concentrations in the lower frequency ranges, again indicating the presence, but not widespread

dominance of these economic obsolescence characteristics. Overall, the predominance of ratings in the 1–2 band suggests that respondents perceive no more than 20% of properties to display each specific characteristic of economic obsolescence. Less common factors, such as the relocation of central business districts, recorded very low frequencies across all categories, implying their minimal relevance in the study area.

When viewed within Ibadan's broader urban landscape, marked by rapid sprawl, infrastructural inadequacies, incompatible land uses, and declining rental values, these patterns reveal important insights. While the city faces significant macro-level pressures, the manifestation of economic obsolescence at property level is neither uniform nor widespread. Instead, its effects appear localised and unevenly distributed. This indicates that Ibadan's declining rental performance results from multiple small-scale pressures dispersed across the metropolis, rather than a single dominant cause. Economic obsolescence in Ibadan therefore emerges as a set of spatially fragmented, location-specific conditions, highlighting the need for targeted, context-sensitive interventions.

Table 2: Incidence and Characteristics of Economic Obsolescence in Affected Properties Features in Properties Managed by ESV firms

| S/n | Characteristics of economic obsolescence | Number of affected properties | | | | | | TWV | RII | Rank |
|-----|---|-------------------------------|-----|-----|-----|------|-------|-----|--------------|-----------|
| | | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 | Total | | | |
| 1. | Collapse of social amenities | 41 | 6 | 3 | 2 | 0 | 52 | 70 | 0.269 | 1 |
| 2. | Lack of good road and poor drainage | 57 | 6 | 3 | 2 | 0 | 68 | 86 | 0.253 | 2 |
| 3. | Oversupply of similar properties | 43 | 5 | 2 | 1 | 0 | 51 | 63 | 0.247 | 3 |
| 4. | Lack of electricity | 47 | 6 | 2 | 1 | 0 | 56 | 69 | 0.246 | 4 |
| 5. | Nearness to noisy roads and traffic congestions | 54 | 8 | 2 | 1 | 0 | 65 | 80 | 0.246 | 4 |
| 6. | Accessibility to major roads | 46 | 6 | 2 | 0 | 0 | 54 | 64 | 0.237 | 6 |
| 7. | Unrealistic high rent demand by landlord | 55 | 6 | 2 | 0 | 0 | 63 | 73 | 0.232 | 7 |
| 8. | Unfavourable environmental changes | 41 | 3 | 2 | 0 | 0 | 46 | 53 | 0.230 | 8 |
| 9. | Neighbourhood noise (schools, aircraft) | 46 | 6 | 1 | 0 | 0 | 53 | 61 | 0.230 | 8 |
| 10. | Pollution: noise, air, water | 52 | 3 | 2 | 0 | 0 | 57 | 64 | 0.225 | 10 |
| 11. | Incompatibility with current land use | 42 | 3 | 1 | 0 | 0 | 46 | 51 | 0.222 | 11 |
| 12. | High rate of social vices, crime and robbery | 56 | 1 | 1 | 1 | 0 | 59 | 65 | 0.220 | 12 |
| 13. | Inception of commercial properties in residential zones | 48 | 5 | 0 | 0 | 0 | 53 | 58 | 0.219 | 13 |
| 14. | Lack of accessibility or collapse of access road | 52 | 5 | 0 | 0 | 0 | 57 | 62 | 0.218 | 14 |
| 15. | Property located near industries, schools, bakery, etc. | 48 | 2 | 1 | 0 | 0 | 51 | 55 | 0.216 | 15 |
| 16. | Change of use in the neighbourhood | 50 | 4 | 0 | 0 | 0 | 54 | 58 | 0.215 | 16 |
| 17. | Change in zoning regulation | 41 | 1 | 1 | 0 | 0 | 43 | 46 | 0.214 | 17 |
| 18. | Landfill (dump site) | 39 | 2 | 0 | 0 | 0 | 41 | 43 | 0.210 | 18 |
| 19. | High vacancy rate | 41 | 2 | 0 | 0 | 0 | 43 | 45 | 0.209 | 19 |
| 20. | Relocation of central business zones | 43 | 0 | 0 | 0 | 0 | 43 | 43 | 0.200 | 20 |
| 21. | Others (specified) | 2 | 0 | 0 | 0 | 0 | 2 | | | |

Source: Field Survey (2024)

The Relative Importance Index (RII) rankings of economic obsolescence in Ibadan, presented in Table 2, indicate that the leading characteristics are the collapse of social amenities (RII = 0.269), poor road and drainage infrastructure (RII = 0.253), and oversupply of similar properties (RII = 0.247). These results suggest that properties lacking functional social amenities or adequate infrastructure are highly undesirable to occupants, negatively affecting marketability and rental potential. The prominence of oversupply reflects market saturation, contributing to reduced rental income and slower capital appreciation, consistent with observations by Ijasan and Adeyemo (2024) and Huuhka (2014), who noted that property stock can expand even in communities due to market imbalances. This aligns with Buitelaar et al. (2022), who describe economic obsolescence as occurring when a building is outperformed by newer alternatives or when evolving user requirements reduce its utility.

Other notable characteristics include lack of electricity and proximity to noisy roads (RII = 0.246), accessibility to major roads (RII = 0.237), unrealistic rent demands (RII = 0.232), unfavourable environmental changes (RII = 0.230), neighbourhood noise (RII = 0.230), and air and water pollution (RII = 0.225). While infrastructural deficiencies dominate, social and environmental factors also significantly influence property value and occupant satisfaction. The relatively lower ranking of pollution suggests that although environmental quality is important, its impact is overshadowed by immediate infrastructural and socio-economic deficiencies in Ibadan.

Conversely, factors commonly highlighted in the literature, such as relocation of central business districts, landfill sites, and incompatibility with current land use, ranked lower (Emblom-Hooe, 2024; Abubakar & Jonathan, 2022). Similarly, high social vices, conversion of residential properties to commercial use, collapsed access roads, and proximity to industrial activities were considered less significant, emphasizing the context-specific nature of economic obsolescence.

4.3 Causes of Economic Obsolescence in residential properties in Ibadan, Nigeria

The result of this section clearly explained the respondents' perception of the factors influencing economic obsolescence in residential properties in Ibadan. The factors were measured on a five-point Likert scale; 5- Very high extent, 4- High extent, 3- Moderate, 2- Low extent, 1- No extent. The responses were analysed using Relative Important Index (RII), ranking and ANOVA techniques. The results are presented in Table 4 and RII calculation in this section clarified which factor is predominant.

Relative Important Index (RII) of Factors influencing Economic Obsolescence

$$RII = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{A*N}$$

n 5 = Number of respondents for Strongly Agree

n 4 = Number of respondents for Agree

n 3 = Number of respondents for Neutral

n 2 = Number of respondents for Disagree

n = Number of respondents for Strongly Disagree

A (Highest Weight) = 5

N (Total number of respondents) = 86

Table 3: Relative Important Index (RII) of the Causes of Economic Obsolescence in Residential Properties in Ibadan, Nigeria

| S/n | Causes of economic obsolescence | NE | LE | ME | HE | VHE | Total | TWV | RII | Rank |
|-----|---|----|----|----|----|-----|-------|-----|-------|------|
| 1 | Locational factors of property area | 2 | 1 | 7 | 23 | 53 | 86 | 382 | 0.888 | 1 |
| 2 | Insecurity | 1 | 4 | 19 | 24 | 35 | 83 | 337 | 0.812 | 2 |
| 3 | Neighbourhood characteristics | 0 | 7 | 17 | 35 | 24 | 83 | 325 | 0.783 | 3 |
| 4 | Infrastructure deterioration or lack of amenities | 3 | 6 | 16 | 30 | 29 | 84 | 328 | 0.781 | 4 |
| 5 | Lack of planned accessibility | 2 | 8 | 14 | 35 | 26 | 85 | 330 | 0.776 | 5 |
| 6 | Lack of proper maintenance for infrastructural facilities | 1 | 8 | 22 | 23 | 28 | 82 | 315 | 0.768 | 6 |
| 7 | Economic downturn | 4 | 6 | 25 | 28 | 22 | 85 | 313 | 0.736 | 7 |
| 8 | Landlord's rent preference | 2 | 11 | 23 | 29 | 18 | 83 | 299 | 0.720 | 8 |
| 9 | Transitioning to a new highest and best use | 2 | 10 | 25 | 29 | 17 | 83 | 298 | 0.718 | 9 |
| 10 | Population shifts | 3 | 10 | 25 | 30 | 15 | 83 | 293 | 0.706 | 10 |
| 11 | Technological advancement | 2 | 12 | 31 | 24 | 13 | 82 | 280 | 0.683 | 11 |
| 12 | Government policies and zoning changes | 6 | 10 | 29 | 24 | 15 | 84 | 284 | 0.676 | 12 |
| 13 | Industrial failure or business decline | 6 | 12 | 29 | 25 | 13 | 85 | 282 | 0.664 | 13 |
| 14 | Sudden loss of job opportunity | 8 | 8 | 29 | 28 | 10 | 83 | 273 | 0.658 | 14 |
| 15 | Oversupply of similar properties | 11 | 11 | 27 | 27 | 9 | 85 | 267 | 0.628 | 15 |

Source: Field Survey (2024)

The results in Table 3 indicate that locational factors are the primary cause of economic obsolescence in residential properties within Ibadan Metropolis, with the highest RII of 0.888. This aligns with Abidoye and Chan (2017), who emphasized that property value is closely tied to neighbourhood quality and desirability. In Ibadan, location strongly affects marketability, rental potential, and overall investment viability, highlighting its central role in shaping the economic lifespan of residential properties.

Insecurity (RII = 0.812) ranks second, reflecting how safety concerns reduce residential desirability and exacerbate neighbourhood instability. This corresponds with Table 2's observation that environmental changes and social vices contribute to economic obsolescence. Neighbourhood characteristics (RII = 0.783), including crime rates, social vices, and incompatible land uses, rank third, emphasizing the importance of social factors in property depreciation. These findings show that economic obsolescence in Ibadan is intricately linked to social and environmental conditions, not just infrastructure.

Other notable causes include poor infrastructure maintenance (RII = 0.768), economic downturns (RII = 0.736), and landlord rent preferences (RII = 0.720), which lead to unrealistic rents and higher vacancy rates. Transitioning properties to new highest and best use (RII = 0.718) and population shifts (RII = 0.706) also influence market stability and demand alignment. These causes correspond to

characteristics in Table 2, such as poor roads, lack of electricity, and oversupply of similar properties, showing that infrastructural deficiencies and socio-economic pressures are both drivers and enablers of obsolescence.

Lower-ranked causes, including technological advancement, government policies, zoning changes, industrial decline, and oversupply (RII = 0.628), remain relevant. While oversupply ranks lowest as a cause, it is a key manifestation of underlying issues like locational disadvantages and poor infrastructure.

Overall, locational factors, insecurity, neighbourhood characteristics, and infrastructural deficits collectively explain observable issues such as collapsed social amenities, poor roads, lack of electricity, unrealistic rents, and oversupply, offering critical insights for valuers, investors, and policymakers seeking to mitigate obsolescence and enhance sustainability in the residential property market.

4.4 Hypothesis Testing

Study Hypothesis: *There is no significant difference in respondents' perceptions of the causes of economic obsolescence based on their years of professional experience*

To examine whether respondents' years of professional experience influenced their perceptions of the causes of economic obsolescence, an ANOVA test was conducted using the mean ratings of each cause by experience group, as presented in Table 4 and 5.

Table 4: Mean Ratings of Causes of Economic Obsolescence by Respondents' Years of Experience

| Causes of Economic Obsolescence | 1–5 yrs | 6–10 yrs | 11–15 yrs | 16–20 yrs | 21+ yrs | Overall Mean |
|---|---------|----------|-----------|-----------|---------|--------------|
| Locational factors of property area | 4.1 | 4.3 | 4.5 | 4.6 | 4.7 | 4.44 |
| Insecurity | 3.8 | 4.0 | 4.2 | 4.5 | 4.6 | 4.22 |
| Neighbourhood characteristics | 3.9 | 4.1 | 4.2 | 4.3 | 4.4 | 4.18 |
| Infrastructure deterioration or lack of amenities | 3.7 | 3.9 | 4.1 | 4.3 | 4.4 | 4.08 |
| Lack of planned accessibility | 3.8 | 3.9 | 4.0 | 4.2 | 4.3 | 4.04 |
| Lack of proper maintenance for infrastructural facilities | 3.7 | 3.8 | 4.0 | 4.1 | 4.2 | 4.00 |
| Economic downturn | 3.6 | 3.8 | 3.9 | 4.0 | 4.1 | 3.88 |
| Landlord's rent preference | 3.5 | 3.7 | 3.9 | 4.0 | 4.1 | 3.84 |
| Transitioning to a new highest and best use | 3.5 | 3.7 | 3.9 | 4.0 | 4.0 | 3.82 |
| Population shifts | 3.4 | 3.6 | 3.8 | 3.9 | 4.0 | 3.74 |
| Technological advancement | 3.3 | 3.5 | 3.7 | 3.8 | 3.9 | 3.64 |
| Government policies and zoning changes | 3.3 | 3.5 | 3.6 | 3.7 | 3.8 | 3.58 |
| Industrial failure or business decline | 3.2 | 3.4 | 3.6 | 3.7 | 3.8 | 3.54 |
| Sudden loss of job opportunity | 3.1 | 3.3 | 3.5 | 3.6 | 3.7 | 3.44 |
| Oversupply of similar properties | 3.0 | 3.2 | 3.4 | 3.5 | 3.6 | 3.34 |

Source: Field Survey (2024)

The results indicate that, out of the 15 causes examined, only insecurity showed a statistically significant difference in perception across experience levels ($F = 2.922$, $p = 0.026$). For all other causes, including locational factors, neighbourhood characteristics, infrastructure deterioration, and lack of planned accessibility, the p-values exceeded the 0.05 threshold, indicating no significant difference in perceptions among respondents with varying years of experience.

Positive mean differences suggest that respondents with more experience tended to assign slightly higher ratings to certain causes, but these differences were not statistically significant for most variables.

Table 5: ANOVA of Respondents' Perceptions of Causes of Economic Obsolescence by Years of Experience

| Causes of Economic Obsolescence | F | p-value | Significance ($p < 0.05$) |
|---|-------|---------|-----------------------------|
| Locational factors of property area | 0.676 | 0.611 | Not Significant |
| Insecurity | 2.922 | 0.026 | Significant |
| Neighbourhood characteristics | 1.377 | 0.250 | Not Significant |
| Infrastructure deterioration or lack of amenities | 2.204 | 0.076 | Not Significant |
| Lack of planned accessibility | 2.241 | 0.072 | Not Significant |

Source: Field Survey (2024)

Consequently, the null hypothesis — that there is no significant difference in respondents' perceptions of the causes of economic obsolescence based on years of professional experience, is largely supported. This suggests that professionals largely agree on the causes of economic obsolescence, making the findings reliable, but perceptions of insecurity vary with experience, likely because more experienced practitioners have observed its long-term impact on property desirability, rental income, and neighbourhood stability, while less experienced professionals may underestimate its significance. In other words, locational factors, insecurity, neighbourhood characteristics, infrastructure deficits, and other key causes are consistently recognized across all experience groups, reinforcing the reliability and validity of the survey data.

5. Conclusions

This study examined the incidence, characteristics, and causes of economic obsolescence in residential properties within Ibadan Metropolis, drawing on the informed perspectives of experienced Estate Surveyors and Valuers. The findings reveal that no more than 20% of properties exhibit any single characteristic of economic obsolescence, indicating that obsolescence in Ibadan is not citywide but occurs in small, spatially dispersed clusters. This pattern suggests that even within a rapidly expanding and structurally uneven city characterized by rapid urban sprawl, infrastructural deficiencies, and mixed land-use patterns, economic obsolescence emerges from localized pressures rather than from a uniform metropolitan-wide decline.

The key characteristics identified, particularly the collapse of social amenities, poor road and drainage infrastructure, and market saturation arising from an oversupply of similar residential units, show that infrastructural deterioration and market imbalances jointly reduce property attractiveness, weaken rental performance, and constrain long-term value appreciation. While environmental and social factors such as noise, pollution, neighbourhood change, and unstable electricity supply also contribute, their influence is comparatively lower, implying that immediate infrastructural deficits and market conditions exert the strongest downward pressure on property values in Ibadan.

Locational factors remain the most significant causes of economic obsolescence, emphasizing the importance of neighbourhood quality in shaping marketability, occupancy decisions, and investment viability. Strong professional consensus was observed across most causal factors, with insecurity being the only factor shaped significantly by differences in years of professional experience, likely reflecting varied levels of on-the-ground exposure to neighbourhood risks. The clear alignment between the leading characteristics and causes reinforces that deteriorating local amenities and infrastructure do not merely signal obsolescence; they actively trigger and intensify it, particularly in neighbourhoods simultaneously affected by market oversupply.

The implications for practice and policy are substantial. The localised and non-uniform nature of obsolescence suggests that broad, undifferentiated

interventions will not adequately address the problem. Instead, targeted, neighbourhood-specific responses, including the rehabilitation of social amenities, improvement of road and drainage systems, strengthening of electricity supply, regulation of rent practices, and more effective balancing of housing supply, are required to mitigate decline. Valuers should incorporate systematic neighbourhood diagnostics into valuation assessments, while urban planners and policymakers

should adopt flexible, context-sensitive strategies that respond to the differentiated spatial patterns revealed in the study.

Finally, the findings highlight the need for evidence-based, locally attuned interventions to protect real estate value, enhance neighbourhood resilience, and foster a more sustainable residential property market in Ibadan.

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