Chapter 9
Summary and Policy Implications

9.1 Introduction

This chapter summarizes the findings on the specific objectives of the book. It reflects on the research findings to present a discussion that engages the research questions. The chapter contains seven content-specific sections. The next section presents a recap of the study, which summarizes all the chapters. The specific implications of the study’s findings follow this in Sect. 9.3. Section 9.4 discusses the contributions of the research to the body of knowledge while Sect. 9.5 discusses the novelty of the research. Section 9.6 highlights the major limitations of the study. The last section looks beyond the achievement of the study to wider issues surrounding its context and provides an agenda for future research opportunities.

9.2 Summary

The aim of this book is to develop a choice model that offers an empirical and theoretical understanding of the externality of a grave on tenants’ residential choices in the private rented sector. Five objectives were set for the achievement of the broad aspiration of the book. The study context is Akure in South Western Nigeria. However, the study cast a wider reflection on international context characterized partly by the growing informality in the residential markets of developing countries on one hand and a specific focus on the impact of a negative externality on rent and residential choices on the other. The study was inspired by the codification of access to decent residential housing as the right of every household, which lay enormous pressure on every nation to the achievement of a residential environment that protects social welfare and value. The study applies a growing SP research method “choice experiment” to achieve its aim.
In all, the book consists of nine content specific chapters. Chapter 1 presents a discussion on the study background with specific reference to statement of the problems, research questions, purpose and objectives. Chapter 2 presents a review of key concepts in land administration and management. It starts with a discussion on the functions of land administration and the principles set to achieve them. It touches upon the tenure system that defines who owns what and the term. The discussion is expanded to explore land use policy and development control with a particular reference to Nigeria. The chapter observes a uniformity in land administration functions, however, its system varies from place to place. It notes a gap between the functions and current achievement of land policy and development control in Nigeria.

Chapter 3 explores the gap discovered in chapter two to present a critique of the literature within the specific context of the Nigerian property market. It starts with a discussion on the study area. It progresses with a theoretical review on the property market efficiency and conceptualizes the Nigerian residential property market from the purview of purpose efficiency. The chapter examines man-land relationship to provide an insight into the understanding of the land market, which is dominated by the informal sector. Transactions in the informal sector are largely unregulated, hence, the leeway to many land use practices that often culminate in negative externalities. The general housing market exhibits a paradox of two cities in one; the informal market is dotted with the phenomenon of homes with graves, while the formal market is without residential properties’ graves.

Chapter 4 dwells on the concept of a negative externality. It conceptualizes the location of a grave within the residential housing as a source of a negative externality and provides a review of social media discourse on cremation as an alternative to it. It theorizes negative externalities from neoclassical economist and social points of view. The neoclassical economist solutions to negative externality de-emphasize government intervention and lack welfare content, this limits the relevance of its wider applications where households’ health and social welfare are at risk. Planning approach to solving negative externalities encompasses social value; however, its goals have been truncated in Nigeria. Lack of political might to acquire land for essential services such as cemeteries and other factors leaves a gap between the potential benefits of planning and the current nature of the study area.

In Chap. 5, the study presents a review of the empirical assessment of the impact of negative externalities on residential choices and values with a focus on the application of RP and SP approaches. It notices a large application of the hedonic pricing model in the assessment of the economic value of negative externalities, however, its relevance is limited to the availability of historic data. The studies provide dissenting opinions on the impact of negative externalities (such as CAFO, cemetery, noise and air pollution) on residential property values and choices. This leaves a knowledge gap in the literature with regard to the possible impact of residential property with a grave on rental and household home choices. The chapter discusses the conceptual framework that guides the study. The chapter notes that economic theory underlying non-market valuation is based on neoclassical economics of consumer theory and choice. As conceptualized by the utility maximization model, it reveals that households are maximizers who operate on bounded rationality to make a residential choice
that offers the highest benefits among different alternatives. It specifies the conceptual paradigm explaining the specifics of the residential choice context of the study and the generic compensatory choice framework process. It presents a discussion on the model specification with specific reference to Random Utility Model, which guides utility function and households’ WTP.

Chapter 6 dwells on the methodology and starts with a discussion on the research design. A discussion on the pragmatic research philosophy adopted in the fact-finding mission follows this. The research method is mainly quantitative with a blend of some qualitative elements. The strategy of inquiry comprises both survey and experimental approach. The chapter discusses the target population, sample size and the quota technique applied for the collection of the sample. It delineates the scope of the research within the objectives set to examine the residential properties with graves in the informal market renter sector in Akure. The chapter presents a detailed discussion on the specific SP method adopted for modelling tenant residential choices. It notes that two SP methods could be applied, however, choice experiment is preferred to the CV method due to its consistency with consumer theory. The chapter discusses the experimental design algorithms. It highlights the advantages and methodological issues of the SP approach and discusses the validity measures applied in the study to establish the reliability of model estimates.

Chapter 7 dwells on the presentation and analysis of the descriptive data. The analysis dwells on tenants’ responses to the questions on the location of a grave in their current homes. Chapter 8 presents and analyses the stated choice data and discusses the findings on parameter estimates of specific research objectives. This chapter presents a summary and the policy implications of the study. It specifies the contribution of the research to the existing body of knowledge and provides an agenda for further research opportunities.

9.3 Summary of Findings, Implications and Recommendations

This section reflects on the synthesis of findings on the research objectives to provide a discussion, which directly engages the research questions. It dealt with four interacting questions. To begin with, the book seeks to answer the question of the impact of negative externality of a grave on a tenant’s residential choice. Secondly, it seeks answers to the question of whether the location of a grave within a residential property leads to a significant loss in rental value. Thirdly, the question as to whether the Burial on Private Premises law is efficient to deliver homes with the element of social welfare to tenants is addressed. Fourthly, the study seeks the answer to a question on the adequacy of the neoclassical economics solution to the negative externality of a grave on a residential property. These questions are considered important to the need to protect, namely the social welfare of the people with limited property rights, the essential functions of the residential property market and its’ regulatory mechanism.
Despite the preference for a home without a grave, the first question asked in the study seeks to find out the effects of graves on tenants’ residential choices. The implications of the findings that answer this question are in two folds. First, 67% of the tenants will move homes against their wilful choice if graves are suddenly located in their current homes (see Fig. 7.4). This effect emerges from the psychological, horrible, unexplainable and aesthetic effect of a grave on 78.3% of the tenants (see Fig. 7.3). Second, the implication of the untimely decision to move homes shows that there is no guarantee to tenants’ security of tenure in the private renter sector. Extending this argument, the finding reveals that the resultant tenure insecurity is with a low-income skew. Most of the low-income groups, specifically 43.9%, are constrained to live in a residential property with a grave while 26.5% would sacrifice their social welfare for the unexpired term of their tenancies and move homes as soon as they expire. Unfortunately, the tenants’ social welfare may be sacrificed for a year as 83% of the sample population are on yearly tenancies. Conversely, most tenants with high and middle income are able to move homes if a grave is suddenly located on their current homes (see Fig. 7.5). The findings on the effect of a grave on tenants’ residential choices are consistent with Wallace (2012) and Fitzpatrick and Pawson (2011) who note that tenants may be forced to move if the psychosocial attribute of their homes is affected or there is a proven moral concern.

The findings show that the grave factor is the most important variable affecting tenants’ residential choice decisions (see Table 7.14 in Chap. 7). The no grave variable level plays a significant role to accord this status on the attributes’ importance profile. A location with accessibility advantage to work and local services has a relatively low significant impact on tenants’ residential choices. This implies that most tenants would generally not trade off a choice of a residential property that guarantees social welfare for accessibility advantage and cheap rent on a property with a grave. This finding strengthens the robustness of the previous studies that tend to de-emphasize accessibility as the most important attribute affecting households’ residential property choices.

Concerning the question of whether the externality of a grave in a home leads to a significant loss in rent, two major implications depicting the complexity of the residential property market emerge. These implications emanate from the current reality in the market and the fixed choice questions. Firstly, from the estimated WTP on current market realities, estimates show that a residential property with a grave would lose between 15 and 20% in the open market rent. Estimates show that the possibility of a 20% loss in rent on a home with a grave is higher. Secondly, from the fixed choice model estimates, all things being equal, if the residential market offers properties that are attractive in terms of all other attributes but with a grave, a residential property will lose between 5 and 15% in the market rent. Estimates show that the possibility of losing 5% is higher.

Concerning the location of a grave at different parts of a residential property, the findings reveal a differential loss in rental value. Tenants tend to prefer the choice of a home with a grave in the backyard, hence the lowest loss in rental value (5%) on it. The inferences show that the reason for this is perhaps the infrequent view of such a grave by tenants whose frequent point of call revolves around the frontage.
and the room of their residences. This finding is consistent with the study of Larsen and Coleman (2010), which shows that view has a significant impact on the choice and sales’ value of homes where nearby cemeteries are visibly seen in Portland. The estimated tenants’ choice in this study and previous studies tends to answer the obvious question on the rationality of tenants’ choices among a set of good and bad alternatives residential properties.

Generally, the implication of the significant loss in market rent is a reduction in the stream of income derived from rent. This will, in turn, reduce the ability of a property to finance itself by way of producing enough income for maintenance cost, debt service and returns on investment. Similarly, the vacancy rate and letting risk on residential property with a grave would increase significantly as tenants’ economic status improves and has marked improvement on other variables. The HB model estimate from the fixed choice data shows that WTP 10% above the open market rent has the highest utility estimate (see Table 7.15). This implies that since the majority of the tenants are not willing to take the advantage of 20% rent discount, a residential property with a grave may lose more if there are no deficiencies in other residential attributes. Against the backdrop of the significant loss in the rental value of a residential property with a grave, the study explores answers to the question on the adequacy of the Burial on Private Premises Law.

The third question bothers on whether or not the Burial on Private Premises Law is adequate to prohibit the location of graves on residential properties. The residential property market offers tenure options with which individuals can have access to homes. Tenants have access to residential properties through formal and informal markets, regulated by a generic Burial on Private Premises Law and other environmental health regulations. Surprisingly, cases of residential properties with graves are exclusively restricted to the informal market. Unlike the formal property market, the restrictions and quantum of rights transferred to a property owner in an informal land market are undefined at the point of purchase.

Irrespective of the nature of the property market, the Environmental Health Law in Akure intends to ensure social order with respect to the prohibition of graves on residential properties. However, the ambivalence and lack of definiteness in the Burial on Private Premises Law renders it inefficient and somewhat hypothetical. The law makes a proviso for permission to allow the location of graves within residential properties. Even though property owners rarely seek permission, such proviso paved the way for voluntary compliance and discriminatory enforcement. In addition, the lack of definiteness in the exception to the rule with reference to those allowed by custom to use private premise for grave reduces the tenants’ ability to apply the concept of Nimbysm to protect their social welfare. Exception is a commonplace in law for flexibility and other moral grounds, however, the findings challenge its appropriateness in this research context. According to Edgerton (1985), if laws are so important for creating and maintaining social order, why are exceptions there to them? Exception to the Burial on Private Premises Law weakens its adequacy to prohibit the hazardous use of residential properties for graves and renders both tenants and other stakeholders vulnerable to environmental hazards and psychosocial
deprivation. The cumulative effect of the inadequacy of law is that tenants’ social welfare is subject to market dictates.

Regarding the fourth question, the study seeks an answer to the efficiency of the perceived neoclassical economics solution to residential properties with graves in Akure. In consonance with the general ideal of the conceptual framework and consumer theory of choice, the models’ estimates reveal consistent massive preference for a residential choice without a grave. Sensitivities to rent discount show that there is no direct relationship between reduced rent and demand for a residential property with a grave. This finding is consistent with respect to the location of a grave in four different parts of a residential property. The implication of this finding is that most tenants are not keen on taking advantage of rent discounts. With specific reference to the maximum rent discount (20%), tenants’ sensitivities are inelastic in three of the four locations of a grave within a residential property (see Figs. 7.1, 7.11, 7.12 and 7.14 and 7.14 in Chap. 7). They are rather willing to pay 10% above the market rent on a residential property without a grave if there are no deficiencies in other variables. This shows that most tenants prefer a residential property that optimizes their social welfare when they are looking to rent. Worst still, if a landlord attempts to let a residential property with a grave at no discount in rent, tenants’ sensitivities to it at the four different locations are elastic but with a negative sign. This implies that most tenants who are looking to rent will reject such a property. According to Steinacker (2006), the appropriate solution to a negative externality is contingent on people’s acceptance. The implication of the poor sensitivity to rent discount in a residential property with a grave in this study shows that the neoclassical economics solution does not provide adequate compensation for loss in welfare. Most tenants would not sacrifice their social welfare for a monetary compensation.

Conceptualizing the property market efficiency from a purpose point of view, it is evident that the neoclassical economics approach is inefficient to offer a pareto-optimality in the residential market. In addition, the market approach lacks the ability to prevent the location of a grave in a residential property. Although the formal market is without residential properties with graves, the inability to replicate this characteristic in the informal sector points to the inefficiency of the residential market. While the formal market appears as good a model, advocacy for a formal residential property market that covers the city and the nation at large is not practicable. Government attitude to the acquisition of more land, poor commitment to current acquisition and her current stance, which de-emphasizes direct involvement in residential supply, affects the size of the formal market. The implication of this is that the future of the city is largely tending towards the domination of the informal market. Consequently, the preponderance of residential properties with graves would continue in the informal residential estates of the city if the Environmental Health Law remains inefficient.

In conclusion, the study reveals tenants’ preferences for residential properties without graves in Akure. It reports a significant loss on rental value in a residential property with a grave. While a massive preference for a residential choice without a grave is stated, its achievement across tenants of all income groups is locked outside
the informal residential market. This calls for a reflection on the fundamental functions of the land administration principle with specific reference to “rights, restrictions and responsibilities” which dictate the characteristics of the residential property market. The questions as to the quantum of right held in land and restriction of use by property owners should be overhauled against the current practices in the informal residential property market.

Against the backdrop of the obvious defect in the Environmental Health Law, the study argues for an urgent amendment to the Burial on Private Premises Law. To achieve this, the image of the law should be conceptualized from social construction to remove any ambivalence. The law should stipulate unconditional prohibition of a grave in a residential property and provide sufficient definiteness for a rare exception, perhaps for Monarchs who have cemeteries in their palaces. This will facilitate access to social welfare, irrespective of the renter sector a tenant explores to secure a home. On this premise, the recommendation is a departure from the exception to the rule, which is a commonplace in law. It queries the wider application of Holton’s (2010) argument that exceptions prove the rule and insistent that whilst there is an exception, the rule still stands. Exceptions in fragile environmental matters undermine the rule, particularly in the wake of Ebola Virus (EBV) and Corona Virus (Covid-19), which require safe disposal of deceased sufferers in the West Africa Subregion.

Similarly, the capitalist instinct of the public authorities to cemeteries and perhaps other service land uses needs to be orientated towards social welfare. A cemetery is the conventional approved location for graves and the most popular method for safe disposal of human remains in Akure and the country at large. However, alternative measures to graves such as cremation practice in America, Europe and Asia should be brought to fore for formal discussion. This is necessary to explore the inherent benefits over current practices which pose a sustainability issue on residential choice and rent.

9.4 The Book’s Contribution to Knowledge

Following the achievement of the aim and objectives of this research, this research has made significant contributions to the existing body of knowledge. This is discussed under three agendas of evidence in Sects. 9.4.1–9.4.3.

9.4.1 Contribution to Methodology

The methodology adopted in the research is largely popular in the developed world, specifically in the field of marketing and transport studies. While the application of this methodology in Nigeria and developing countries is scarce, its application best suits such immature property market with an inadequate and reliable record of
historic property data. The application of the stated choice experiment method in this research provides a good reference point for future research in the study area where the reliability of historic data is doubtful.

9.4.2 Contribution to Literature Publication

The research adopts a conceptual framework known as Random Utility Model, and the findings satisfy its proposition of rationality of consumer choice amongst a set of products with varying attributes. It does not only validate this theory, but it also shows that tenants’ social welfare is more important than reduced rent. The study adds to the existing body of knowledge by revealing the tenants’ intention to purchase their social welfare if the residential property market does not protect it. The estimation of tenants’ choice from the fixed choice data shows that tenants are willing to pay an extra 10% above the open market rent of a residential property without a grave when all other neighbourhood and housing attributes are good. This contribution strengthens the robustness of previous findings on tenants’ attitudes to cheap rent, particularly on a residential property with poor quality. It emphasizes the limitation of the neoclassical economics approach to negative externalities in the residential property environment. A journal article published in the refereed Journal of Real Estate Literature and two papers presented at international conferences further substantiate the study’s contribution to existing knowledge (see Appendices H, I and J).

9.4.3 Contribution to Policy Formulation

The study has shown the need for a clear-cut formulation of the statement of intention in the use of property rights to protect social welfare of the populace. The current Environmental Health and Safety Law that prohibits the location of a grave in a residential property creates room for voluntary compliance. The ambivalent nature of the law produces no meaningful impact on the efficiency of the residential market. Consequently, the research provides a major turning point for policy formulation that could enhance the efficiency of the residential property market. Secondly, it provides an insight into the need to revisit urban policy on land allocation for cemeteries and frequent usurpation of service land for other purposes.

9.5 Novelty of the Research

Studies on negative externalities are widely represented in the existing literature but most of the works are from the occidental. Similarly, most of the studies are largely inspired by natural occurrences and activities that are legally permissible,
but create negative externalities, which affect residential values. In developing countries, although much has been discussed in the literature on a widespread informality of residential property development, only a few research efforts have been made to examine the impact of negative externalities on households’ residential choices and property values. To date, despite the large volume of empirical studies on negative externalities in Europe and America, none of the studies has explored households’ choices and WTP in residential properties with graves. Bolitzer and Netusil (2000) and Larsen and Coleman (2010) investigated the impact of cemeteries on residential properties’ sales value in Ohio. They relied on historic evidence of value and applied revealed preference methods in their studies. These studies and other informal publications coupled with the discourse on Nigerian social media offer a bit of information on people’s attitudes to the location of graves within residential properties. They are good a point of reference to this investigation but are tangential to the focus of the study.

This research is a land breaking attempt at modelling tenants’ residential choices in the PRS with a wide spread of homes with graves and a quantitative effort to examine its impact on rental values. It provides an avenue through which some bits of valuable information in the discourse review and the broader agenda of this research can enter into formal publication.

Concerning the method applied, the research adopts a unique methodological approach “known as choice experiment” in its fact-finding mission. This method has been widely applied in the developed world with the proven reliability of result, however, to date, there is no record of the application of such an approach in any of published materials in Nigeria. This research, therefore, provides an insight into a growing methodological approach suitable for choice modelling and economic valuation of non-market goods. It offers a good replacement for HP models and CV that are currently subject to heavy criticisms. Considering the taxonomy of the observed sensitivity to the location of graves in different parts of a property, the study contributes to the existing body of knowledge, which disapproves wider relevance of the neoclassical economic theory to solving the problems of negative externalities. It consolidates initial findings from a few studies such as Walker et al. (2002) and others that most households prefer a socially acceptable residential property than a neoclassical theory of financial compensation for properties with some form of negative externalities.

Fundamentally, the research also makes a useful contribution to the ongoing debate on land reform and the need for clearly defined property rights for market efficiency. It highlights issues that are of significance to policy implications. For instance, it contributes to the fact that a free market cannot provide socially acceptable residential properties to the tenants. Hence, it strengthens the opinion on government intervention in the property market and advocacy for a wider involvement to protect residential property choices and rent.
9.6 Limitation of the Study

The major limitation of this study is the failure to collect data from all the relevant stakeholders in the informal residential market. For instance, the roles of the property owners are unknown in the current market circumstance. If one of the contributions to knowledge is tenants’ residential choices in an impacted market, its shortcoming is the inability to inquire about the rationale for supplying grave impacted homes to the market.

Further, the methodological issues surrounding the research approach limit the achievements of the study. First, the reality of happenings on the field opposes the proposed random sampling method. It was impracticable to collect the data by random sampling as invitations to participate in the survey were turned down by some tenants; consequently, the study resorted to quota sampling. While the degree of limitation of such a method is generally unknown and perhaps negligible, there is no obvious evidence against wider applications of the study’s relevance. However, the caveat for generalizing the research findings across other cities with similar negative externalities is a reasonable caution.

While there are no perceived clues suggesting an error in the reliability of the research findings, the general issues with the experimental research method may persist. Reliability of data is the major criticism of the previous applications of the stated choice experiment method. The study controls all methodological loopholes capable of affecting the reliability of the model estimates; for instance, the inclusion of a status quo option eliminates forced choices and strategic behaviour. With that, the research elicits reliable information on what respondents would choose in reality, but there is no absolute guarantee to a commitment to the chosen option. Notwithstanding, this is an inherent methodological issue with experimental research.

9.7 Agenda for Future Research

This study deals with the negative externalities of graves located within a house in the private rented sector of the housing market. Specifically, it examines the influence of such practice on tenants’ residential choices and market rent. While the book finds a significant impact of the influence of a grave on a tenant’s choice and WTP, some limitations provide opportunities for further research on wider issues highlighted below.

- A study with a specific focus on the potential buyers’ choice and the WTP for a residential property with a grave is a vacuum needing a research effort. The impact of graves on the sales value of adjoining residential properties provides a research opportunity for the further empirical understanding of the subject matter.
- Similarly, from a wider perspective, it is unclear whether the location of a grave on residential properties is satisfactory to the property owners. Hence, from the
property owners’ point of view, a study on the choice of a residential property abutting another with a grave is a major gap for future research direction.

- From a social stance, the impacts of the externalities of graves on neighbourliness, homelessness and communal spirit offer a veritable direction for further studies.
- Lastly, there is a need to examine planning politics and the local content of the environmental health law prohibiting negative externalities in the residential market.

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