

## **APPRAISING THE EFFECT OF VARIATION IN CRIME ON PROPERTY VALUES IN PORT HARCOURT, NIGERIA**

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### **ABSTRACT**

*The study appraised the effect of variations in crime on Property values in Port Harcourt. The primary data for the study was obtained from statistics and perceptions on the prevalent crime types in five neighborhoods in Port Harcourt namely; Diobu, Port Harcourt Township, Borokiri, Ogbunabali, and D-Line. The identified crime types include burglary, housebreaking, robbery, kidnapping, and stealing. The study investigated crime perceptions and consequent actions and discovered that for prospective tenants, the higher the level of perceived crime in a neighborhood, the lesser the willingness of tenants to seek for residential spaces in that neighborhood. However, the perception of residents within these neighborhood's, were a bit different as they perceived crime to be low, and to therefore, have little effect on the value of properties in the neighborhoods in terms of voids. It was also found that the crimes under study are not high enough in any of the neighborhoods to induce relocation of neighborhood inhabitants from these neighborhoods.*

**KEYWORDS:** *Crimes Perception, Neighborhood Crime, Port Harcourt Neighborhoods, Property Values*

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### **INTRODUCTION**

The demand for real property in most urban and sub-urban areas in Nigeria has continued to increase over the years, which has resulted in value increases for properties in those areas. The value of real property depends on its demand in relation to its level of scarcity and utility (Olusegun, 2003). A fall in demand as a result of the high wave of crime in a neighborhood will give rise to a fall in property values. Many types of crime are prevalent in different areas of Port Harcourt, which affect the demand for and market values of properties in those areas. However, several other factors such as accessibility, neighborhood and environmental characteristics have been identified to positively or negatively influence property values (Ajibola, Ebikefe and Awodiran, 2014). In many societies crime is directed by criminal elements towards causing threats to the lives of residents in an area. This could be as a result of the uncontrolled growth pattern in most fastest growing urban and sub-urban neighborhoods. According to Gibbons (2004), the consequences of spontaneous urbanization and the uncontrolled growth pattern in most cities manifest in diverse urban problems such as urban decay where visible forms of drug use, criminal damage to public and private properties and anti-social behaviors are the order of the day. Bannister and Fyfe (2001), are of the view that the fear of crime is related to densely populated and built-up environments; and it promotes insecurity and anxiety among residents, and affects many aspects of everyday life in our

cities and neighborhoods.

In most urban areas, including Nigerian urban settlements, the fear of crime has led most inhabitants to live in constant apprehension and insecurity. The extent and nature of crime could in several ways influence the values of residential properties in crime affected areas or neighborhoods. This is based on the fact that would-be tenants with knowledge of the crime situation of a neighborhood and who have the financial resources to afford alternative accommodation will prefer taking up residential spaces in other safer neighborhoods. Where a neighborhood is unsafe as a result of crime, demands for residential spaces are likely to fall and give rise to falling rental values. Gibbons (2004), opines that no matter the nature of crime, it will have a drastic effect on households' intention to change their dwelling location. Hence, variation in crime will affect property values. Also, potential investors in real property would always be concerned with crime rates in neighborhoods in making their choices of investments (Bello, 2011). Crime by its nature is problematic all over the world, especially in urban neighborhoods where it can affect residents' ways and approach to life. Therefore, in most neighborhoods, residents would prefer rural or suburban neighborhoods because of the reduced rates of crime in such localities. Nyabvedzi and Chirisa (2012) have observed a preference for rural habitation, to avoid the problems and stress posed by various forms of urban crime prevalent in urban neighborhoods. Bello (2011) also noted that a high crime rate in an urban neighborhood will lead to a corresponding increase in the level of insecurity in that neighborhood. This implies that the level of crime within a neighborhood can affect the demand for properties in that neighborhood; and where there is a drastic fall in demand a fall in property values will result.

The aim of this study, was to investigate the nature of crime prevalent in 5 neighborhood's to ascertain if there was any preference for one neighborhood over the other as a result of variation in crime rates. The key objectives were to determine if the level of crime affects the willingness to occupy properties in unsafe neighborhoods; to determine if tenants were willing to vacate residences as a result of a crime; and to explain the implications on property rental values.

## **REVIEW OF LITERATURE**

High level of social disorder manifests in high levels of crime, which is a factor affecting the decision of households to reside in a particular neighborhood. This decision will be dependent on households' perceptions of crime and their willingness to pay for residential spaces, in particular locations or parts of a city (Bello, 2011). It is perceived that the existence of environmental or neighborhood hazards can impact negatively on the value of properties in a neighborhood, whether this perception is rational or not (Patchin, 1991); and users of real property, whether owners or occupiers, will make decisions that maximize utility and wealth, given price and income constraints (Gibler and Nelson, 1998). Crimes are wrongs committed by persons or group of persons against the state or other individuals. The successful habitation of residents in neighborhoods lies in the ability of security agencies to provide adequate security to forestall possibilities of deviant behaviors in the neighborhoods. Crime remains a problem in most neighborhoods, and what constitutes crime are contained in the laws defining offenses or crimes in Nigeria. Such crimes, as applicable in Port Harcourt, are provided for in the Criminal Code Act of Southern Nigeria.

Hastings (2008) & Olajide & Lizam (2016), hold the view that poverty, illiteracy, unemployment, homelessness and poor parenting are capable of influencing youths and predisposing them to criminal tendencies. When persons become predisposed to crime they will become threats to their societies, hence, their activities will be capable of affecting the minds of residents to seek for safer neighborhoods for habitation. Olajide et al (2016) identified some major categories of crime associated with Nigerian urban centers. These include burglary, stealing, robbery, homicide crimes, sexual offenses,

etc. They opine that the consequences of crime will, among other things, affect investments in housing; which implies that a fall in the level of crime in a neighborhood will most likely lead to an increase in property investments and vice versa. Therefore, a reduced crime rate could lead to an increase in demand and occupancy rate and thereby an increase in property values in that neighborhood (Pope and Pope 2011). An increase in crime in one neighborhood will likely lead to a decrease in the value of properties in that neighborhood, and a subsequent drift of occupiers or landholders towards neighborhoods with better and workable security arrangements this increasing the demand and values in the safest neighborhoods. Thaler (1978), in his study, finds a negative relation between property crimes per capita and property values. In his estimation, a one standard deviation increase in the incidence of property crime reduces property values by about 3%. Similarly, a more recent study by Gibbons (2004), finds a one standard deviation increase in property crime for a 10% decrease in property values. That implies that the level of crime in a neighborhood has an effect on the demand for properties in that neighborhood, and a decrease in demand will lead to a fall in property values.

Linden & Rock off (2008) have also observed that over time crime rates may change as the composition and characteristics of neighborhoods change; and reductions in crime levels may correspond to other changes that increase the value of property located in a particular neighborhood. The regular occurrence of these crimes in a neighborhood will have a deleterious effect on property values in that neighborhood. Olajide et al (2016) stated that residential neighborhood crime range from burglary, stealing or theft, street crimes, incivilities, vandalism, robberies, and other violent crimes. Gibbons (2004) found that crimes such as vandalism and arson are crimes that have a greater deleterious impact on property values which are very visible signals of disorder.

The problem of crime control in Nigeria is numerous. Aluyor (2005) is of the view that security agencies are ineffective in abating crimes in Nigeria because of inadequate resources, lack of adequate equipment for fighting and combating crime, the poor location of some police formations, and the failure to adopt the new technology for crime fighting and control in advanced countries. Olajide et al (2016) noted that one of the ways to prevent crime in a neighborhood is by improving security, increasing level of vigilance, creating and maintaining a caring community or neighborhood, and reducing opportunities for crime by increasing crime prevention awareness. Also, a general level of insecurity in a neighborhood can lead to an increase in crime; but a very high level of security will not ordinarily lead to a zero level of crime. Well secured neighborhoods will have the tendency of deterring criminals from intending to commit crimes in the neighborhoods. Ihlanfeldt & Mayock (2010) found the estimated effects of different types of crime on property values; and among seven kinds of crime studied only aggravated assault and robbery has a negative impact upon the neighborhood residential property values. These relationships may specifically vary in different cities or neighborhoods.

Maximino (2014), discovered that a drop in crime is created by intensified policing, which leads to a consequent increase in property values; while Boggess, Greenbaum & Tita (2013), found a relationship between property crime and property values, and they opine that violent crime results in lowering rental values. They also indicated that there is negative influence of crime on residential property investment which could manifest in the area of residential neighborhood decline, abnormal residential mobility, and low productivity in property investment. It follows, therefore, that property values will be affected by insecurity and crime wave within a neighborhood. It may increase or decrease in relation to the level of crime within the neighborhood, all other factors remaining constant.

## METHODOLOGY

The research strategy adopted for this study included a questionnaire survey to collect data from a cross section of neighborhood residents in Port Harcourt, a random sample of estate surveyors and valuers practicing in Port Harcourt, and divisional police officers serving in the designated neighborhoods in Port Harcourt. The purpose was to appraise the effects of variations in crimes on the values of properties in Port Harcourt. This proposition is premised on the notion that an increase in crime in a neighborhood will have a negative effect on the values of properties in the neighborhood. The sampling units for this study are as follows:

- The residents in the five neighborhoods under study in Port Harcourt;
- Estate surveyors and valuers identified in neighborhoods of Port Harcourt; and
- Police officers in charge of the five neighborhoods under study in Port Harcourt.

The study made use of a combination of purposive sampling and stratified random sampling. The rationale for doing this was to obtain a representative sample as well as to avoid bias. Available records in the Rivers State Branch of Nigeria Institution of Estate Surveyors and Valuers showed that there are 169 registered Estate Surveyors and valuers practicing in Port Harcourt. The simple random sampling technique was used to draw 35 (thirty-five) estate surveyors and valuers out of the registered 169 from whom the data was collected for this study. The Demographia World Urban Areas (April 2017) have estimated the current population of Port Harcourt to be 1,960,000 and the total land area is found to be 158 square kilometers. This puts the population density of Port Harcourt to 12,400 persons per square kilometer. The study adopted 0.023% as an appropriate sample of the population of this study, which gives a sample size of 450 household heads, and which spreads evenly to 90 household heads per neighborhood.

## DATA PRESENTATION, ANALYSIS & DISCUSSION

### Data Presentation

Crimes committed in different neighborhoods that produced mean values lesser than 3.00 are more favorable than crimes that produced mean values greater than 3.00. While the former will not cause significant movement of residents, the latter could cause movements of residents away from the neighborhoods that are visibly affected by violent crimes. A massive move to relocate from a neighborhood because of the wave of crime could cause a fall in rental or capital values of properties in that neighborhood. Table 1 below shows the perception of crime in Diobu neighborhood of Port Harcourt. Diobu neighborhood has a total of 70 respondents. Burglary, house breaking and robbery have weighted sums of 245, 194, and 219 respectively, while kidnapping and stealing have weighted sums of 207 and 211 respectively.

From the table, only 'house breaking' and 'kidnapping' produced mean values that are lesser than three (< 3.00). The other offenses under study have mean values greater than three (> 3.00). This implies that 'house breaking' and 'kidnapping' offenses are not very rampant crimes in Diobu neighborhood. Housebreaking and kidnapping have averages of 2.77 and 2.96 respectively, which imply that their effects are not capable of causing movement of residents away from the neighborhood. On the other hand, Offenses of 'robbery' (3.13), 'burglary' (3.07) and 'stealing' (3.01) are perceived by residents to be more frequent than the other crimes under study, which is the reason for the crimes producing mean values above 3.00. These crimes are likely to cause movement of residents away from the neighborhood.

**Table 1: Perception of Crime in Diobu Neighbourhood (N=70)**

Types of Crime Committed	Weighted Mean Score					Observations (x)	Mean (x/N)
	1	2	3	4	5		
Burglary	14	13	13	14	16	215	3.07
House Breaking	16	18	14	10	12	194	2.77
Robbery	12	11	18	14	15	219	3.13
Kidnapping	14	18	10	13	15	207	2.96
Stealing	12	15	16	14	13	211	3.01

**Weighted Mean Score:** 1=(very low), 2=(low), 3=(moderate), 4=(high) & 5=(very high)

**Source:** Field Survey, 2017

The movements of residents will ordinarily create voids in the occupancy rate of the neighborhood, and would thereby have an effect on property values. This same principle as Table 1, was produced for the other four neighborhood's, though not included in this paper, to determine the effects of variations in crime on property values in each neighborhoods. A summary of the comparison of crime rates in Port Harcourt neighborhoods is as shown in Table 2 below. This table shows the average rate per crime from the five neighborhoods. Hence, for Diobu neighborhood burglary, robbery and stealing have mean values greater than 3.00.

**Table 2: Comparison of Weighted Mean Scores of Crime Rates in the Neighbourhoods**

Type of Crime Committed	Diobu (70)	P-H Township (68)	Borokiri (70)	Ogbunabali (65)	D-Line (58)	Mean
	x/N	x/N	x/N	x/N	x/N	
Burglary	3.07	3.04	2.83	2.86	2.93	2.95
House Breaking	2.77	3.07	2.77	2.83	2.83	2.86
Robbery	3.12	2.95	2.96	2.88	2.66	2.92
Kidnapping	2.96	2.97	3.16	2.69	2.69	2.90
Stealing	3.01	2.84	2.89	3.08	3.05	2.97

**Source:** Field Survey, 2017

For Port Harcourt Township only burglary and house breaking have mean values greater than 3.00. The remaining crime types produce mean values lesser than 3.00. In Borokiri neighborhood only kidnapping produced mean value greater than 3.00, which shows the high extent of kidnapping in the neighborhood. Ogbunabali and D-Line neighborhoods have only the offense of stealing as predominant crime in the neighborhoods, producing mean values of 3.08 and 3.05 respectively.

All the crimes under study in the five select neighborhoods of Port Harcourt produce mean values lesser than 3.00, implying that the average crime rate in Port Harcourt is low and not capable of causing major movement of residents out of the neighborhoods of Port Harcourt.

## DATA ANALYSIS & DISCUSSIONS

From analysis of available data, rental values of properties in neighborhoods of Port Harcourt appear to be lower while average crime rate is on the increase. Rental values from the 5 neighborhoods indicated positive signs of increasing when crime is under control, implying that crime affects property values in the study area. The type of property and the predominant crimes in the neighborhood will determine the saleability of the property and its resultant value in the open market. Property value depends on several neighborhood factors, which include a property's ability to produce income, be in demand and have a good location relative to its use. The susceptibility of a neighborhood to crime needs to be factored into the determination of the property's capital or rental values.

**Table 3: Effects of Variation in Neighbourhood Conditions on Property Values (N = 331)**

Effect of Variations in Neighbourhood Conditions on Property Values in PH.	1	2	3	4	5	Sum	Mean
Threat to property Security	54	64	72	83	58	1,020	3.08
Increase in socio-economic burden	66	61	74	60	70	995	3.00
Provision of early pointer to neighbourhood transitions	72	73	51	58	77	987	2.98
High Devaluation of Properties	71	63	67	60	70	988	2.98
Long Void Period of Properties	75	64	65	55	72	998	3.02
Abandonment of development projects	72	65	66	60	68	980	2.96
Faster rate of property deterioration	70	63	65	65	68	991	2.99

**Weighted Mean Score:** 1=(very low), 2=(low), 3=(moderate), 4=(high) & 5=(very high)

**Source:** Field Survey, 2017

Table 3 above displays the effects of variation in neighborhood conditions on property values in Port Harcourt. The nature of crime creates variation in neighborhood conditions on property values in Port Harcourt. These effects are rated on a Likert scale of 1 – 5 producing equated sums from which a mean value will be derived. All other factors falling below 3.00 include the provision of early pointer to neighborhood transitions (2.98); high devaluation of properties (2.98); abandonment of development projects (2.96); and faster rate of property deterioration (2.99). They also agree that an increase in crime rate could lead to a fall in value of land properties in the neighborhoods and vice versa. Also, crime rate could cause possible abandonment of development projects in the neighborhood and create difficulty in getting good class tenants to occupy properties in the neighborhood. These will thereby create periods of voids, which are likely to cause a faster rate of property deterioration. The effects of these elements contribute to the values of properties in the various neighborhoods.

## CONCLUSIONS & RECOMMENDATIONS

The study examined the effects of different levels (variation) of crime on property values in Port Harcourt and has found that, on the average, the crime rate in the Port Harcourt neighborhoods is low as revealed by neighborhood residents and police personnel who participated in the study. This conclusion is reached from an analysis of responses from neighborhood residents in the Port Harcourt metropolis. Therefore, the lower rate of crime in Port Harcourt has very minimal effect on the value of properties in the neighborhoods of Port Harcourt. There is the need to maintain a low level of crime by tackling crimes headlong in the neighborhoods of Port Harcourt to ensure a massive improvement in property values.

In the Port Harcourt metropolis, crime is caused by several socioeconomic factors like unemployment, poor parental upbringing, poverty, homelessness and, in some instances, illiteracy. The gravity of the types of crime under study is capable of creating a shift in demand from neighborhoods with high crime wave to other neighborhoods perceived to have a low crime wave. The low rate of crime in Port Harcourt has an effect on the rate of occupancy, which has a corresponding effect on property values. Therefore, it is established that there is a relationship between the effect of variations in crime and property values in the study area. From a policy perspective, it is important that the government and its agencies ensure that the crime rate in Port Harcourt remains low taking into cognizance all the attendant benefits accruing to neighborhoods with low rate of crime, especially improvements in property values. A low crime wave in a neighborhood would give confidence to residential occupiers to continue living in the neighborhoods, and could result in higher values for properties within each of the residential neighborhoods. Hence, neighborhood residents would feel safer; properties would less likely be destroyed as a result of crime, and property values would increase as a result of the safety of

the neighborhood.

## RECOMMENDATIONS

This study, therefore makes some recommendations to be able to maintain the value profile of properties within the neighborhoods:

- There should be a synergy between the police and residents to improve on human and mechanical surveillance in their neighborhoods. The serious effort towards ensuring neighborhood security will make the neighborhoods liveable, which will contribute to property values in the Port Harcourt metropolis.
- The government should continue to ensure that crime prevention and control is paramount in ensuring a good living condition of neighborhood residents. There is a need for neighborhood youths to be gainfully engaged in various crafts to restrain them from committing crimes. A reduced rate of crime in a neighborhood will contribute to an increase in property value in the neighborhood.
- Government should ensure improvement in crime situations in the neighborhoods of Port Harcourt through active and efficient police divisions in all the neighborhoods under study. This is to ensure deterrence of criminals from the areas, and to ensure that the neighborhoods are secure and liveable.
- It will be worthwhile to create employment opportunities to discourage youths from crime, and encourage them to lead meaningful lives. If neighborhood residents live in their various neighborhoods with crime seriously in check, property owners will continue to experience an upward shift in rental values of properties in the neighborhoods of Port Harcourt.
- Property owners need to provide targeted hardening measures such as razor wire and burglar bars to secure the property against unwanted intruders; while the government needs to ensure regular maintenance of street lighting systems and other neighborhood facilities in order to maintain or improve on property values in the neighborhoods. Also, building elements or components, especially openings (doors and windows) needs to be specially designed to control intruders. This has the sole purpose of discouraging intended criminals from attempting an invasion into the property.

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