**Developing Country Studies** ISSN 2224-607X (Paper) ISSN 2225-0565 (Online) Vol.6, No.8, 2016



# Impediments to the Implementation of Property Rating in Bauchi Metropolis, Nigeria

Habu Mallam Baba\*1 Rozilah Kasim<sup>2</sup> Muktar Usman Alhaji<sup>3</sup> Baffa Sule<sup>3</sup> Haruna Suna Maje<sup>4</sup> Aliyu Ahmad Aliyu<sup>1</sup>

- 1. Department of Estate Management and Valuation, Faculty of Environmental Technology, Abubakar Tafawa Balewa University Bauchi, PMB 0248, Nigeria.
  - 2.Department of Real Estate & Facilities Management, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia.
- 3. Department of Estate Management, School of Environmental Studies, The Federal Polytechnic Damaturu, PMB 1006, Yobe State, Nigeria

4. Department of Works, Yobe State University, Damaturu, Nigeria

#### **Abstract**

Property Rating Practice (PRP) is globally recognized as potential and lucrative source of revenue to local governments; PRP is doing pretty well in Europe, America and Asia, its performance in most African countries is not satisfactory. This paper identified the factors that impedes the implementation of property rating in Bauchi metropolis, Nigeria. The methodology used includes literature and questionnaire survey; the questionnaire were administered by simple random sampling to respondents across twelve neighbourhoods in the metropolis, other respondents came from the Ministries of Lands and Housing, Environment and Sanitation as well as professionals in the field of real estate valuation and management. The descriptive and inferential statistics like frequency table and Structural Equation Modelling were used in the analysis to determine whether identified factors really impedes the implementation of property rating; and whether the factors have any relationship with provision of neighbourhood facilities and services in Bauchi metropolis of Nigeria. The results of the findings indicated that 'Over-reliance on Crude Oil Revenue' and 'Poor Taxation System' are the leading factors that hinders the implementation of PRP in Bauchi metropolis of Nigeria.

Keywords: Property Rating Practice, Neighbourhood facilities and Bauchi Metropolis, Nigeria.

## 1.0 Introduction

Property Rating Practice (PRP) also called tenement rate is essentially a tax levied annually on real property (land or building) for the purpose of maintaining and upgrading the quality of the living environment in terms sanitation, neighbourhood facilities provision, and others services (Johnson et al., 2005; Nwachukwu & Emoh, 2010). The levy is directly charge on the value or income derived from the property but is not levied on individual (Abbott, 2008). The tax is termed 'ad valorem tax' in that the determination of the tax liability is based on the value of the property (Jacobus, 2010). Rating is administered within the jurisdiction of local government, thus it constitutes an integral source of internally generated revenue (Ogbuefi, 2004). Property rating among other local revenues is proved to be most stable, viable and reliable in that real property is immovable, the value of land and improvements, upon which the tax is levied, is conspicuously and physically clear and easy to calculate thus hiding relevant information becomes difficult (Babawale, 2013 & Salmaso, 2014).

The practice of rating property is global, its percentage contribution to local government total revenue is high as much as 90% of the sub-national revenue in UK, USA, Australia, Canada, Ireland and New Zealand was remitted by property taxation (Presbitero et al., 2014), furthermore, in Slack & Bird (2014) 50% of municipal revenue in France and Belgium, 73% in USA, 100% in Australia, UK, and Ireland is generated from this tax. Municipality in these countries rely so much on the tax (Plimmer & McCluskey, 2010). Property tax is very potential and its contribution to economic growth and development are conspicuous. This potential is not being harnessed by many developing countries as such the impact of the tax is not physically seen, even as the State Edict have advocated for tenement rating and provide necessary legal instrument for the exercise. Bauchi metropolis and all local governments in Nigeria relies heavily on federal grants for their expenditures such that the municipalities cannot provide or maintain the basic neighbourhood facilities and services with the internal revenue like property taxation (Akindele et al., 2002; Achara, 2003; & Alo, 2012).

Developed countries have been tapping the potential benefits inherent in property rating, but developing countries have not yet achieved satisfactory result amidst rapid degeneration of neighbourhood facilities (Babawale, 2013), the persistent dilapidation of neighbourhood facilities is not only accelerated by occasional poor workmanship in project development but also by lack of maintenance (Eti et al., 2006; Michael, 2013). If planned maintenance programme is put in place by way of upgrading the quality of facilities and services, an improved quality of life can be sustained (Liu et al., 2010). Thus, PRP is all about neighbourhood facilities development and maintenance.

It can be discerned that neighbourhood facilities development requires colossal amount of money, to



earmark such capital and develop a project/an infrastructure, is not the end of the exercise; preventive and routine maintenance is imperative to keep the project or community infrastructure in good condition, PRP by law is to provide finance to local authorities for the purpose of maintaining community infrastructure (Oyegbile, 1996; Kuye, 2002; Ogbuefi, 2004). Maintenance exercise on neighbourhood facilities tends to strengthen the services offered by the facilities and ensure smooth operation of day to day activities, and reduce to a great extent individual expenses and running cost in different economic operations (Ahren & Parida, 2009). Thus, neglect to PRP culminates to forfeiture of huge revenue it can generate, and hence, the dilapidation of neighbourhood infrastructure perseveres.

The existing condition some neighbourhood facilities in the study area ranging from road network, sanitation, power supply, national telecommunication, others includes water supply and public leisure centres can be described as unsatisfactory due to lack of maintenance programme (Abbass, 2007). Given the fact that far back in 1601 PRP was occasioned by persistent degeneration of neighbourhood infrastructure and facilities like roads, schools, sewages, healthcare service, sanitation and so on in United Kingdom (Oyegbile, 1996 & Kuye, 2002); this development led the enactment of an Act called "The Statute of Elizabeth or Poor Relief Act of 1601". Further improvements on PRP across the world was to impose the culture of maintenance on community infrastructure. While property rating practice that is known to be useful in finance community infrastructure and services (Slack, 2011), is not implemented in the study area (Muhammad & Ishiaku, 2013), this paper therefore identified the local factors that impedes the implementation of PRP in Bauchi metropolis of Nigeria.

#### 2.0 Literature Review

The evolution of property rating in Nigerian context was linked to the colonial era under United Kingdom; further development in terms pattern of judicial system and leadership style took bearing from that of United Kingdom, as a result of that property rating laws in Nigeria are almost a replicate of rating laws of the colonial master, in Ogbuefi (2004) & Salau (2013) one of the source of Nigerian law (rating) is the English Statutes extended to Nigerian. However, variation do exist according to the peculiar local characteristics. For instance in United Kingdom *property occupier* are required to pay the tax, while in Nigeria is *property owner* (Ogbuefi, 2004), the first rating law in Nigeria was the Assessment Ordinance of 1915 for Lagos State, later amended to cover the whole of Nigeria in Assessment Ordinance of 1958.

In most developing countries, property tax is not positioned well to harness optimum revenue (Norregaard, 2013); as such the tax in relation to GDP in these countries is less than 0.6%, whereas in some OECD countries property tax contribution to GDP is more than 2% (Bahl *et al.*, 2008). Improper rating implementation is a factor to reckon with; according to Mangioni (2010) the implementation of property taxation in Denmark is one of the best, in that the tax is assessed and imposed by the central government, then assigned to the municipal government, the taxation process is robust as data on real properties collected by central government enables uniform assessment and administration of the tax centrally with consistency. Across Nigeria, property rating suffered from total lack of implementation in cities like Bauchi, to improper implementation in other states like Lagos metropolis, in Babawale & Nubi (2011) property tax reformed to *land use charges of 2001* in Lagos state was repudiated by the general public and the relevant professionals for being inconsistent to conventional practice.

The development of property tax varies according to countries, in Poland real property tax was adopted in 1986, and the combination of urban, agricultural and forest constitutes property taxes that remit 13% of local revenue; though property tax remit meagre amount in Czech Republic, land and buildings are assessed differently on the basis of land area and floor space respectively; unlike Estonia where the tax is levied on land only; but generally the tax is not a strong source of revenue for financing local services in Armenia, Czech, Estonia, Poland, Russia and Slovak (Malme & Youngman, 2001). Property tax evolved from simple tax on land produce (mainly agriculture) to taxes on real property (land and building) in between the tax metamorphosed to different forms in different countries, according to Mangioni (2010) some times in the past chimney (fireplace) tax and window tax was applied in England; room tax in France and USA; also there was frontage tax as well as 2<sup>nd</sup> story tax; the basic fact is, the tax is an *ad valorem* applied on land, improvements, plants and machinery. Nowadays multiple-rate property rating is being adopted for taxing land and improvements separately, with higher rate applied to land and lower rate applied to improvements, as practiced in Pittsburg, USA (Anderson, 1999; England & Zhao, 2004; Cohen & Coughlin, 2005;).

The tax funds are used to finance the evacuation of refuse, cleaning of the environment, provision and maintenance of basic amenities in the community (Oyegbile, 1996, Kuye, 2002 and Rangwala, 2003). An efficiently implemented property tax can foster community infrastructure and services (UN-HABITAT, 2011); however many local peculiar factors impedes its implementation in developing countries, according to UN-HABITAT (2011) among other things fiscal cadastral data, property market condition and administrative capacity are required to implement the tax. Most of the municipal authorities do not have the capacity to collect necessary data and establish the machinery for implementing the tax, this situation called for both states and federal government to come in and strategized as can be recalled in Mangioni (2010) that Denmark central government is



in the forefront in organizing, assessing and imposing property tax in the municipal area. Against this background and in line with the decrepitude condition of some neighbourhood facilities in the study area, and the fact that property tax (property rate) that can finance neighbourhood facilities is not implemented, this study investigates the factors that impeded the implementation of property rating practice.

## 2.1 Factors Identified as Impeding the Implementation of PRP

Information gathered through literature survey outlined four factors as the major obstacles militating against the implementation PRP in Bauchi metropolis. 'Lack of political will' was identified as one of the factors (Muhammad & Ishiaku, 2013); several other researchers at different place have identified this factor as one of the problems. (See Table 1.1) The second factor is the 'over-reliance on crude oil revenue' this is a phenomenon common in the Nigeria's revenue generation system, it was reported that prior to independence in 1960 and the post-independence period toward late 1970, agriculture was the mainstay of Nigeria's economy and major source of revenue; this scenario suddenly change when oil was discovered and the oil boom instantly changed the direction of the economy, agriculture was abandoned and more than 83% of the federal revenue is generated from oil sales in the international market (Ayadi, 2005; Odularu, 2008; Oyeyemi, 2013 & Alley *et al*, 2014), as such internal revenue sources were equally neglected. The same scenario was reported by Elisa & Timothy (2008) and Oseni (2013).

The prevalence of corruption was mentioned in Jumare (2014); Udoka (2013); Jolaoso *et al* (2013) and Fjeldstad & Heggstad (2012); the impact of corruption in relation to community infrastructure was emphasized in (Micah *et al.*, 2012; Uma and Eboh, 2013 & Ogbuagu, *et al.*, 2014). Poor taxation system is another factor outlined in some literatures as militating against the tax. As in Aluko (2005); Babawale (2013); Jumare (2014). The National Tax Policy have not emphasized much on property taxation in Nigeria. To ratify the factors established through literature survey, empirical data was collected from the study area, in order to allow for analysis which paved way to accept or reject hypotheses.

Table 1.1 Factors impeding the implementation of PRP in Bauchi Metropolis, Nigeria.

|    | Identified Factors           | Author's Name                      | Date |
|----|------------------------------|------------------------------------|------|
| 1. | Lack of political will       | McCluskey et al., 2002 in Babawale | 2013 |
|    | (LPW)                        | Muhammad & Ishiaku;                | 2013 |
|    |                              | McCluskey & Franzsen               | 2005 |
|    |                              | Fjeldstad & Heggstad,              | 2012 |
|    |                              | Franzsen                           | 2002 |
|    |                              | Jolaoso et al.,                    | 2013 |
|    |                              | Petio                              | 2013 |
|    |                              | World Bank.                        | 1996 |
| 2. | Over-reliance on oil revenue | Elisa & Timothy;                   | 2008 |
|    | (ORCOR)                      | Oseni                              | 2013 |
| 3. | Corruption                   | Jumare                             | 2014 |
|    | (C)                          | Udoka                              | 2013 |
|    |                              | Jolaoso et al.,                    | 2013 |
|    |                              | Fjeldstad & Heggstad,              | 2012 |
| 4. | Poor taxation system         | Jumare                             | 2014 |
|    | (PTS)                        | Babawale                           | 2013 |
|    |                              | Aluko                              | 2005 |
|    |                              | Olawande & Ayodele                 | 2011 |
|    |                              | Babawale & Nubi                    | 2011 |

## 3.0 Research Methodology

The methodology first entailed in-depth literature survey, which led to the development of research constructs and measurement items that enables data collection by questionnaire survey. Pilot study conducted earlier help to sieve the measurement items to a more refined and relevant ones. The questionnaires were administered by systematic random sampling. In Krejcie & Morgan (1970) relationship exist between population and sample size and as population figure increases, the sample also increase but at a diminishing rate. In a table for determining the appropriate sample for a given population, a sample of 380 can represent a population of 40,000 (Krejcie & Morgan, 1970). Using systematic sampling 'N' represents the entire population and 'n' represents the sample size, while 'K' is the sample interval. The sample of 380 respondents are drawn systematically and equally from the population; once the first unit is selected, other units are simply determined and picked at 105 Kth interval (Ary *et al.*, 2010). Thus, 380 questionnaires were distributed, and 358 were retrieved for analysis. Descriptive statistics and Structural Equation Modelling (SEM) were used to analyze the data, and determined whether the identified factors really impedes PRP in Bauchi metropolis, Nigeria and accept or reject the outlined hypotheses.



#### 3.1 hypothesis

The study established the prevailing obstacles against PRP in the study area and find out the causal relationship between the identified factors and property rating; as well as between property rating and neighbourhood facilities. The assertion gave rise to five hunch of hypotheses below:

H1: 'Lack of political will' have negative effects on PRP.

H2: 'Over-reliance on crude oil revenue' have negative effects on PRP.

H3: 'Corruption' have negative effects on PRP.

H4: 'Poor taxation system' have negative effects on PRP.

H5: PRP have certain influence over Neighbourhood Facility Provision.

#### 3.2 Data Analysis: Demographic Analysis.

The demography of the sample depicts the size and distribution in terms of sex, age, occupation, education and income. The sample elements were drawn by systematic sampling to ensure equal representation. A total of 380 questionnaires were distributed and 358 were returned back, indicating that 22 were missing; and in the process of data screening 24 responses were discovered to have entailed several unengaged responses and outliers, and so they were deleted, making the total elements in the sample to be 334. As illustrated in Table 1.2 below, about 60% of the respondents are male; 75% are civil servants, over 60% have obtained first degree in different fields of studies, with income varying mainly according to the level of academic achievements.

Table 1.2: Demographic Analysis

| Gender            | Frequency | %    | <b>Cumulative %</b> |
|-------------------|-----------|------|---------------------|
| Male              | 198       | 59.3 | 59.3                |
| Female            | 136       | 40.7 | 100                 |
| Total             | 334       | 100  |                     |
| Marital Status    |           |      |                     |
| Single            | 137       | 41.0 | 41.0                |
| Married           | 197       | 59.0 | 100                 |
| Total             | 334       | 100  |                     |
| Age Distribution  |           |      |                     |
| 18-30             | 101       | 30.2 | 30.2                |
| 31-50             | 197       | 59.0 | 89.2                |
| 51-70             | 36        | 10.8 | 100                 |
| Total             | 334       | 100  |                     |
| Occupation        |           |      |                     |
| Business          | 62        | 18.6 | 18.6                |
| Civil Service     | 249       | 74.5 | 93.1                |
| Farming           | 23        | 6.9  | 100                 |
| Total             | 334       | 100  |                     |
| Education         |           |      |                     |
| National Diploma  | 56        | 16.7 | 16.7                |
| B Sc              | 212       | 63.5 | 80.2                |
| M Sc              | 57        | 17.1 | 97.3                |
| Ph. D             | 9         | 2.7  | 100                 |
| Total             | 334       | 100  |                     |
| Income N          |           |      |                     |
| 1,000 - 50,000    | 57        | 17.1 | 17.1                |
| 51,000 - 100,000  | 128       | 38.3 | 55.4                |
| 101,000 - 150,000 | 130       | 38.9 | 94.3                |
| 151,000 - 200,000 | 19        | 5.7  | 100                 |
| Total             | 334       | 100  |                     |

#### 3.3 Reliability Analysis

Reliability analysis is particularly necessary in this study because the measurement items composed on the instrument for data collection are newly developed on the basis of literature survey that outlined four factors that impedes PRP, which also formed the exogenous variables in this study. There is need to examine the internal consistency of the items in line with the research constructs, in Adams and Lawrence (2015) reliability is a crucial factor in the conduct of a research, in that reliability analysis test the internal consistency of items, which are fundamental in determining the validity of the results. Measurement items or scale of measurement are internally consistent if alpha value is between 0.70 and 0.95 (Gliem & Gliem, 2003; Pallant, 2010; Tavakol & Dennick, 2011;



### Adams & Lawrence, 2015).

Table 1.3: Reliability Indicator

| S/N         | Factors                        | Cronbach's | Cronbach's Alpha Based on | No. of |
|-------------|--------------------------------|------------|---------------------------|--------|
|             |                                | Alpha      | Standardized Items        | Items  |
| 1.          | Lack of Political Will (LPW)   | 0.950      | 0.950                     | 4      |
| 2.          | Over Reliance on Crude Oil     |            |                           |        |
|             | Revenue (ORCOR)                | 0.953      | 0.954                     | 3      |
| 3.          | Corruption (C)                 | 0.914      | 0.913                     | 5      |
| 4.          | Poor Taxation System (PTS)     | 0.935      | 0.935                     | 6      |
| 5.          | Property Rating Practice (PRP) | 0.857      | 0.857                     | 4      |
| 6.          | Neighbourhood Facility         | 0.940      | 0.940                     | 6      |
|             | Provision (NFP)                |            |                           |        |
| Total Items |                                |            |                           |        |

The reliability analysis for the four exogenous constructs and the two endogenous constructs have achieved the required internal consistency (see Table 1.3 above). Prior to this, the data was screened for missing values and unengaged responses using Excel programme by inserting the formula =COUNTBLANK(A1:AC1) for missing data; and for =STDEV.P(A2:AC2) for detecting unengaged responses, both reported no missing data or unengaged response is found. Outliers in the demographic data are checked using Boxplot in SPSS; while the main data are screened for outliers using Mahalanobis D² in SPSS AMOS. On the other hand, the correlation between the four exogenous variables was calculated to be less than 0.85 as indicated in (Awang, 2014) that correlation above 0.85 shows that there is multicollinearity problem, which in effect indicates that one of the variable is redundant, or the two variables represent the same construct. Also the collinearity statistics in the multicollinearity test shows that the Variance Inflation Factor (VIF) is less than the threshold of 3.00, and Tolerance above 0.10 these indicates good exogenous variables.

The Exploratory Factor Analysis (EFA) was conducted to understand the data collected from the field survey for the purpose of developing structural equation modelling (Lee, 2007), and again the fact that the question were newly developed, it is pertinent they undergo pilot study and exploratory factor analysis (Byrne, 2010). With the application of EFA the measurement items were refined and reduced by half. Leading to confirmatory factor analysis which was metamorphosed to structural equation modelling. The result of the measurement model (CFA) is given in Table 1.4 below.

#### 3.4 The Measurement Model

The revised measurement model with 28 items of measurement, has achieved absolute level of fitness indices (Unidimensionality). However, RMSEA value can fall within 034 to .062 (Byrne, 2010).

Table 1.4 Requirements of the Fitness Index of the Confirmatory Factor Analysis

| Category Name    | Index Name | Level of Acceptance | Index Value | Comment                 |
|------------------|------------|---------------------|-------------|-------------------------|
| Parsimonious Fit | Chisq/df   | < 3                 | 1.543       | Required level achieved |
| Incremental Fit  | TLI        | > 0.90              | 0.973       | Required level achieved |
| Incremental Fit  | CFI        | > 0.90              | 0.977       | Required level achieved |
| Incremental Fit  | NFI        | > 0.90              | 0.937       | Required level achieved |
| Absolute Fit     | GFI        | > 0.90              | 0.903       | Required level achieved |
| Absolute Fit     | RMSEA      | < 0.08              | 0.040       | Required level achieved |

The result of the analysis presented in Figure 1.1 below is summarized in Table 1.4 which indicated that the index value obtained falls within the level of acceptance Furthermore, this measurement model in Figure 1.1 was modified to the structural model in Figure 1.2, to enable hypotheses testing in this study.



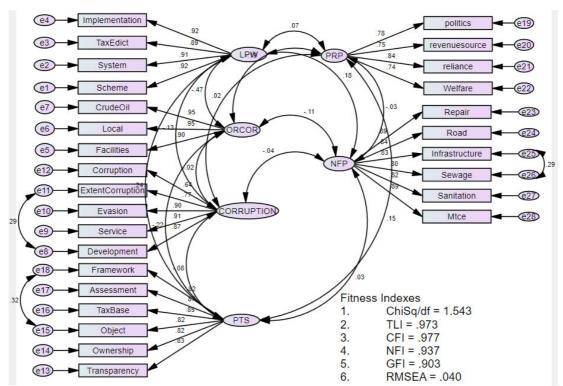


Figure 1.1 Measurement Model (Confirmatory Factor Analysis).

#### 4.0 The Structural Model

The relationship among the latent variables is explicitly explained in the structural model, thus, the structural model tends to indicates the extent by which a given variable directly or indirectly have causal effects or influence on another variable (Byrne, 2010). The fitness of the structural model in figure 1.2 has achieved the acceptable requirements, as illustrated in Table 1.4 above.

| Two to the butter of the butte |                |          |          |         |          |
|--|----------------|----------|----------|---------|----------|
| Path   | Unstandardized | Standard | Critical | P-Value | Remark   |
|  | Estimates      | Error    | Ratio    |         |          |
| LPW - PRP  | -0.032         | 0.056    | -0.570   | 0.568   | Rejected |
| ORCOR - PRP  | -0.160         | 0.62     | -2.571   | 0.010   | Accepted |
| Corruption - PRP   | 0.017          | 0.052    | 0.320    | 0.749   | Rejected |
| PTS - PRP  | 0.110          | 0.055    | 2.012    | 0.044   | Accepted |
| PRP - NFP  | -0.052         | 0.075    | -0.696   | 0.486   | Rejected |

Table 1.5 Estimates for the Structural Model.

From Table 1.5 it can be discerned that 'Lack of Political Will' and 'Corruption' do not have negative impact on 'Property Rating Practice' while 'Over-reliance on Crude Oil Revenue' and 'Poor Taxation System' both have negative impact on 'Property Rating Practice'; on the other hand, 'Property Rating Practice' does not have any negative impact on 'Neighbourhood Facility Provision, in Bauchi metropolis of Nigeria.



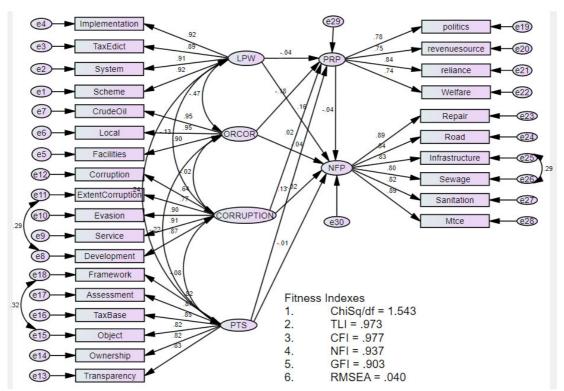


Figure 1.2 Structural Model

In the hypotheses table on Table 5.24 below, H1, H3 and H5 were rejected while hypotheses 2 and 4 were accepted.

Table 1.6 Summary of Hypothesis Testing

| No. | Hypothesis  | Results       |
|-----|---|---------------|
| H1  | 'Lack of Political Will' have negative effects on PRP             | Not supported |
| H2  | 'Over-reliance on Crude-oil Revenue' have negative effects on PRP | Supported     |
| Н3  | 'Corruption' have negative effects on PRP                         | Not supported |
| H4  | 'Poor Taxation System' have negative effects on PRP               | Supported     |
| H5  | PRP have certain influence over NFP                               | Not supported |

## 5.0 Discussion

The extensive literature review indicated four factors as the major impediments against PRP in Bauchi metropolis, these factors were subjected for field survey, and data collected were analyzed with Structural Equation Modelling (SEM) in SPSS AMOS. The identified factors formed the hypotheses, even though there was a legislative provision for PRP called State Tenement Edict of 2007, the tax is not implemented, and based on the empirical data collected and analyzed hypothesis 1 "LPW have negative effect on PRP" is rejected, nevertheless, the formulation, reformation and implementation of property taxation is purely political, and is really difficult to dissociate taxation from existing political atmosphere. As such this factor was mentioned by several researchers.

Hypothesis 2 "ORCOR have negative effect on PRP" is accepted. This proposition corresponds with the position of quite a number researchers, that over-reliance on oil revenue in Nigeria is imminent, as the oil revenue superseded all other sources of revenue in Nigeria (U.S. Energy Information Administration, 2015; Adamu, 2015; Ademola *et al.*, 2015; African Development Bank Group, 2015). This phenomenon affected PRP as an internal source of municipal revenue in Nigeria. High oil revenue accounts for the abandonment of property rating exercise.

Hypothesis 3 that "Corruption have negative effect on PRP" is not supported. Though, the Prevalence of corruption constitutes great impediments to all sectors in the economy and retards developments; empirical study by Adenike (2013) revealed that corruption per employee exerts negative impact on output per employee in Nigeria. This in turn affects Nigeria's GDP. However, data collected in Bauchi metropolis for the purpose of this research found there is no connection between the prevalence of corruption and the implementation of PRP in the study area, therefore H3 is not significant. However, the overall effects of corruption in Nigeria is far from being insignificant as lack of neighbourhood infrastructure and mismanagement of resources is pervasive prior to 2015 general election. It may be difficult to indicate a direct effect on corruption on PRP, but indirect effect cannot be easily ruled out.

Whereas hypothesis 4 "PTS have negative effect on PRP" is supported, the overall taxation system is



expected to have a significant role to play in shaping the pattern of PRP, incidentally this form of tax is not accorded with high level of importance. The National Tax Policy of 2012 had only made a mere mention of property tax, but failed to emphasize it; it further clarify that both state and local government taxes were not being harnessed to yield higher revenue; as for instance, from 2003 to 2008 the revenue generated by some states in Nigeria is only 10% of their total revenue collected (Federal Ministry of Finance, 2012). This explains the extent of neglect to local sources of revenue, some form of taxations are partially operational, while others are not; this scenario corresponds to the hypothesis that poor taxation system have negative effects on PRP, thus, H4 is therefore accepted.

Hypothesis 5 "PRP have certain influence over NFP" is rejected. Property taxation is one of the local source of internally generated revenue, what property tax can generate as revenue is dependent on complete enumeration of liable properties, good assessment and periodic re-assessment, strict compliance by taxpayers (Kuye, 2002). It was argued that internally generated revenue (IGR) in two-third of the states including Bauchi only accounts for 10% of their respective total revenue (Federal Ministry of Finance, 2012) in other words, the meagre revenue generated can hardly make any impact on the construction cost of community infrastructure in Bauchi metropolis, this proposition has reiterated the rejection of H5 which hypothesized that PRP have certain influence over NFP.

#### 6.0 Conclusion and Further Studies

The decrepitude condition neighbourhood infrastructure and facilities amidst the growing expectation by the general public on government to revitalize all infrastructures and facilities, necessitated the need to diversify revenue source, and change from oil-based economy and harness other avenues, like PRP that has the global reputation to augment local revenue for financing NFP. In the context of this study, government's over-reliance on crude oil revenue and poor taxation system are the major impediments to the implementation of PRP in Bauchi metropolis of Nigeria. There is need to halt the total reliance on crude oil revenue and focus on internal revenue sources like property taxation, as it was proven in several studies to able to generate more than 50% of the total local revenue annually, this can be translated to less dependency on the federal government by municipal authorities. The prevailing taxation system is faulty, empirical data collected and analyzed, indicated that poor system of taxation is one of the problem holding the implementation of PRP. For this source of local revenue to yield viable result, the overall taxation system and policy should be restructured to conform to the conventional standard.

PRP is not in practice in Bauchi, and the 'Over-Reliance on Crude Oil Revenue (ORCOR)' by all the three tiers of government, and 'Poor Taxation System (PTS)' are the leading impediments hindering the implementation of PRP in Bauchi metropolis of Nigeria; and that PRP have no influence over NFP, because neighbourhood infrastructure provision requires colossal finance which property taxation can hardly yield revenue suffice enough to finance the cost development. However, whatever amount property taxation generate, can be of immense importance to the municipal authority, for the purpose of maintenance of neighbourhood facilities and local services. Property taxation if repositioned according to peculiar local customs and economic realities, can yield revenue that is suffice to augment other revenues necessary to maintain neighbourhood infrastructure and services.

### Acknowledgement

This study would have been incomplete without acknowledging the efforts and assistance of Dr. Abubakar A. A. of Bayero University Kano, Nigeria; in the area of data analysis using SPSS and Structural Equation Modelling (SEM) with AMOS.

#### References

Abbass, I. M. (2007). Migration, Poverty and Rural-Urban Habitats in Nigeria. *Joint International Conference on Globalization: Migration, Citizenship and Identity,* Ibadan, Nigeria.

Abbott, D. (2008), Encyclopedia of Real Estate Terms, 3<sup>rd</sup> Edition, London, Delta Alpha Publisher.

Achara, R. A. C. E. (2003). Can Nigerian Local Government Councils Autonomously Impose Rates? *Journal of African Law, Vol.47 No2*, pp. 221-243.

Adams, K. A. & Lawrence, E. K. (2015). Research Methods, Statistics, and Applications. Los Angeles, Sage.

Adamu, A. (2015). The Impact of Global Fall in Oil Prices on the Nigerian Crude Oil Revenue and its Prices. Proceedings of the Second Middle East Conference on Global Business, Economics, Finance and Banking. www.globalbizresearch.org

Ademola, I. S., Olasode, O. S., Raji, O. A. & Adedoyin, A. O. (2015). Government Expenditure, Oil Revenue and Economic Growth in Nigeria. *International Journal of Economics, Commerce and Management. Vol. 3* No. 5, http://ijecm.co.uk/

Adenike, E. T. (2013). An Econometric Analysis of the Impact of Corruption on Economic Growth of Nigeria. E3



- Journal of Business Management and Economics, Vol. 4, No.3 pp. 54 65
- African Development Bank Group (2015). Economic Report on Nigeria. Special Edition, Nigeria Country Office. Ahren, T. & Parida, A. (2009). Maintenance Performance Indicators (MPIs) for Benchmarking the Railway
- Infrastructure: A case study. An International Journal, Vol. 16, No.2 pp 247-258.
- Akindele, S. T., Olaopa, O. R., & Obiyan, A. S. (2002). Fiscal Federalism and Local Government Finance in Nigeria: An Examination of Revenue Rights and Fiscal Jurisdiction. *International Review of Administrative Sciences*, Vol.68 No.4.pp.557-577.
- Alley, I., Asekomeh, A., Mobolaji, H. & Adeniran, Y. A. (2014). Oil Price Shocks and Nigerian Economic Growth. *European Scientific Journal, Vol. 10, No. 19.*
- Alo, E. N. (2012). Fiscal Federalism and Local Government Finance in Nigeria. *World Journal of Education*, *Vol.2*, *No.5*, p.19.
- Aluko, B. T. (2005). Building Urban Local Governance Fiscal Autonomy through Property Taxation Financing option: *International Journal of strategic Property management. Vol. 9* pp. 201 214.
- Anderson, J. E. (1999). Two-Rate Property Tax Effects on Land Development. *Journal of Real Estate Finance and Economics, Vol. 18, No. 2* pp. 181-190
- Ary, D., Jacobs, L. C., Sorensen, C. & Razavieh, A. (2010). Introduction to Research in Education, 8<sup>th</sup> Edition. Belmont, Wadsworth/Cengage Learning.
- Awang, Z. (2014). A handbook on Structural Equation Modeling. Selangor, MPWS Rich Resources.
- Ayadi, O. F. (2005). Oil Price Fluctuations and the Nigerian Economy. *OPEC Review, Vol. 29, No. 3*, pp. 199-217. http://www.researchgate.net/publication/4778688
- Babawale, G. K. (2013). Designing Appropriate Valuation Model for Sustainable Property Tax System in Developing Countries. *International Journal of Law and Management. Vol. 55, No. 3.* pp. 226-246.
- Babawale, G. K. & Nubi, T. (2011). Property Tax Reform: An Evaluation of Lagos State Land Use Charge, 2001, *International Journal of Law and Management, Vol. 5, No. 2*, pp 129 148.
- Bahl, R., Martinez-Vazquez, J. & Youngman, J. (2008). Making the Property Tax Work: Experiences in Developing and Transitional Countries. Cambridge: Lincoln Institute of Policy. scholarworks@gsu.edu
- Byrne, B. M. (2010). Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming 2<sup>nd</sup> Edition, New York. Routledge.
- Cohen, J. P. & Coughlin, C. C. (2005). An Introduction to Two-Rate Taxation of Land and Buildings. Federal Reserve Bank of St. Louis *Review*, *Vol.* 87, *No.* 3. pp. 359-374.
- Elisa, O. O. & Timothy, O. T. (2008). Quantitative Evaluation of Revenue Allocation to States and Local Governments in Nigeria (1999-2008). *European Scientific Journal Vol. 8, No. 3*.
- Encarta Premium Encyclopedia, (2008). Microsoft Student with Encarta Premium DVD.
- England, W. R. & Zhao, M. Q. (2004). Assessing the Distributive Impact of a Revenue-Neutral Shift from a Uniform Property Tax to a Two-Rate Property Tax with a Uniform Credit. Lincoln Institute of Land Policy, Working Paper 04RE2
- Eti, M. C., Ogaji, S. O. T. & Probert, S. D. (2006). Strategic Maintenance-Management in Nigerian Industries: *Applied Energy, Vol. 83, No. 3.* pp. 211-227.
- Federal Ministry of Finance, (2012). National Tax Policy: Federal Inland Revenue Service. www.firs.gov.ng/TAX.../TAX%20Legislations/NATIONAL%20TAX%20P
- Fjeldstad, O. & Heggstad, K. (2012). Local Government Revenue Mobilization in Anglophone Africa: International Centre for Tax and Development, ICTD Working Paper 7. www.ictd.ac
- Franzsen, R. C. D. (2002). Property Assessment for Rating Purposes in Southern and East Africa: Present Status and Future Prospects. 8<sup>th</sup> Annual conference of the Pacific Rim Real Estate Society in Christchurch, New Zealand.
- Gliem, J. A. & Gliem, R. R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education
- Jacobus, C. J. (2010). Real Estate: An Introduction to the Profession. 11 Edition. Mason-USA Cengage Learning. Johnson, T., Davis, K. & Shapiro, E. (2005). Modern Methods of Valuation of Land, Houses & Buildings. London: EPG Books Services.
- Jolaoso, A. B., Musa, N. A. & Olatinwo, A. (2013). The Challenges of Sustainable Infrastructure Development and Vision 20:2020: A Discourse. *African Journal of Social Sciences, Vol. 3, No. 2.* pp. 135-147.
- Jumare, B. (2014). Analysis of Local Governments Revenue Allocations for the Provision of Social and Community Services in Nigeria (1997-2011): *Proceeding of the International Conference on Humanities Sciences and Education, Kuala Lumpur.* www.worldresearchconference.com
- Kuye, O. (2002). Principles and Practice of Property Rating. Lagos: Tony Terry Prints.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement: Vol. 30* pp. 607-610.



- Lee, S. (2007). Structural Equation Modeling: A Bayesian Approach, West Sussex: Wiley.
- Liu, X., Saat, M. R. & Barkan, C. P. L. (2010). Benefit-Cost Analysis of Infrastructure Improvement for Derailment Prevention. Proceedings of Joint Rail Conference, Urbana-Illinois, USA.
- Malme, J. & Youngman, J. (2001). The Development of Property Taxation in Economies in Transition. Case Studies from Central and Eastern Europe. Washington, WBI Learning Resources Series.
- Mangioni, V. (2010). The Evolution and Operation of Recurrent Property Taxation *FIG Congress* Facing the Challenges-Building the Capacity, Sydney.
- McCluskey, W. J. & Franzsen, R. (2005). An Evaluation of the Property Tax in Tanzania: An Untapped Fiscal Resource or Administrative Headache? *Journal of Property Management Vol. 23 No.1* pp 43 69
- Micah, L. C., Ebere, C. & Umobong, A. A. (2012). Tax System in Nigeria Challenges and the Way Forward. *Research Journal of Finance and Accounting. Vol. 3, No. 5.* pp. 9-16. http://www.iiste.org
- Michael, O. B. (2013). Taxation and Tax Policy as Government Strategy Tools for Economic Development in Nigeria: *Journal of Business and Management, Vol. 13, No. 5.* pp. 34-40.
- Muhammad, M. S. & Ishiaku, B. (2013). An Assessment of the Prospects of Property Tax Administration in Nigeria: A Case Study of Bauchi State Board of Internal Revenue. *Elixir International Journal of Social Science 59* pp 15284-15289.
- Norregaard, J. (2013). Taxing Immovable Property: Revenue Potential and Implementation Challenges. IMF Working Paper WP/13/129
- Nwachukwu, C. C. & Emoh, F. I. (2010). Financing Capital Projects in the Nigerian Local Government System; A Property Rating Index. *Journal of the Nigerian Institution of Estate Surveyors and Valuers. Vol. 32, No. 1* pp. 47 49
- Odularu, G. O. (2008). Crude Oil and the Nigerian Economic Performance. Oil and Gas Business. http://www.ogbus.ru/eng/
- Ogbuefi, J. U. (2004). Comparative Property Rating and Taxation. Published by Institute for Development Studies University of Nigeria Enugu.
- Ogbuagu, U., Ubi, P. & Effiom, L. (2014). Corruption and Infrastructural Decay: Perceptible Evidence from Nigeria. *Journal of Economics and Sustainable Development, Vol. 5, No. 10.* pp. 20-27. www.iiste.org
- Olawande, O. A & Ayodele, A Y. (2011). Effects of Property Tax on Sustainable Housing Delivery in Lagos, Nigeria *Journal of Sustainable Development: Vol. 4 No. 1.* pp 173 192.
- Oseni, M. (2013). Internally Generated Revenue (IGR) in Nigeria: A Panacea for State Development. *European Journal of Humanities and Social Sciences, Vol. 21, No. 1.*
- Oyegbile, S. O. (1996). The Principles and Practice of Property Rating and Taxation. Jamesons Graphic Publication. Minna, Nigeria.
- Oyeyemi, A. M. (2013). The Growth Implications of Oil Price Shock in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences. Vol. 4, No 3.* pp. 343-349.
- Pallant, J. (2010). SPSS Survival Manual: A step by step guide to data analysis using SPSS. McGraw-Hill International.
- Petio, M. K. (2013). Role of the Land Valuation Division in Property Rating by District assemblies in Ghana's Upper East region. *Commonwealth Journal of Local Governance Iss. 12* pp 69-89.
- Plimmer, F. & McCluskey, W. J. (2010). The Basis and Administration of the Property Tax: What can be learned from international practice? FIG Congress 2010 "Facing the Challenges, Building the Capacity", Sydney.
- Presbitero, A. F., Sacchi, A. & Zazzaro, A. (2014). Property Tax and Fiscal Discipline in OECD Countries. Economics Letters Vol. 124, No. 3 pp. 428 433.
- Rangwala, S. C., Rangwala, K. S. & Rangwala, P. S. (2003). Valuation of Real Properties. Anand India, Charotar Publishing House.
- Salau, L. T. (2013). Law for Business and Real Estate People. Bauchi, Liberty Graphic Link Nig.
- Salmaso, E. (2014). Property taxation in theory and practice. Dipartimento Di Scienze Economiche Ed Aziendali "M. Fanno", Universita' Degli Studi Di Padova.
- Slack, E. & Bird, R. M. (2014). The Political Economy of Property Tax Reform. OECD Working Papers on Fiscal Federalism, No. OECD Publishing. http://dx.doi.org/10.1787/5jz5pzvzv6r7-en
- Slack, E. (2011). The Property Tax-in Theory and Practice. IMFG Munk School of Global Affairs, University of Toronto. www.utoronto.ca/mcis/imfg/
- Tavakol, M. & Dennick, R. (2011). Making Sense of Cronbach's Alpha. *International Journal of Medical Education 2* pp.53-55.
- Udoka, I. S. (2013). The Imperatives of the Provision of Infrastructure and Improved Property values in Nigeria. *Mediterranean Journal of Social Sciences: Vol. 4, No. 15* pp. 21-33.
- Uma, K. E. & Eboh, F. E. (2013). Corruption, Economic development and Emerging Markets: Evidence from Nigeria. *Asian Journal of Management Sciences and Education Vol. 2, No. 3.* pp. 56-67. www.ajmse.leena-luna.co.jp



- UN-HABITAT (2011). Land and Property Tax: A Policy Guide. United Nations Human Settlements Programme. www.unhabitat.org
- U.S. Energy Information Administration, (2015). Country Analysis Brief: Nigeria. Independent Statistics & Analysis.
- World Bank, (1996). Restoring Urban Infrastructure and Services in Nigeria: Findings, Africa Region, No. 62.