

# **Real Estate Investment Performance Measurement in Nigeria: Problems and Constraints Facing Professionals in a Highly Active but Opaque Market**

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## **Abstract**

Real estate investment plays a vital role in the economic system and the measurement of its performance provides a basis for the analysis of the state of the market and investment decision making at any point in time either at the property level, portfolio level or the property sector level. As a key indicator in the ranking of property markets across the world, real estate investment performance measurement has become an important index in the market maturity framework. However, the Nigerian real estate investment market has continued to be constrained by the absence of recognized performance measurement framework due to several factors. This study, which is part of an extended research, examines the problems and constraints that have militated against the construction of a performance measurement indices for the Nigerian market. The study carries out a questionnaire survey on a sample of 276 Estate Surveying and Valuation firms spread across the Nigerian real estate market. The data collected was analysed using the mean score to rank 21 identified factors that have limited the measurability of the market performance comparative to other globally recognized indices in other real estate markets. Out of the 21 limiting factors, 14 factors were specifically identified as having high impact levels on investment performance measurement of real estate in Nigeria. Among the 14 factors include absence of data unit that tracks market performance

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by the firms, inadequate information about the real estate market, lack of uniform performance measurement benchmark in the industry, limited knowledge of the performance measures by practitioners and the other factors. The study recommends urgent intervention by the Nigerian real estate professional body and its regulator in partnership with investors by creating an online based real estate specific information and data centre to address the identified problems in order to increase the measurability and transparency of the market.

**Keywords:** Highly active, problems and constraints, professionals, real estate investment performance measurement.

## **INTRODUCTION**

The real estate market is a very important sector of any economy and constitutes a significant proportion of the wealth of the country. The Nigerian real estate market has been growing rapidly from 1960 when the country gained her independence from Britain to the current democratic dispensation despite the 2008-2009 housing bubble that orchestrated the global financial crisis, the recent economic recession and the impact of the recent COVID 19 pandemic. The growth of the Nigerian real estate market has been directly linked to the increase in economic activities leading to the inclusion of Nigeria among the MINT countries, comprising Mexico, Indonesia, Nigeria and Turkey (Broll, 2014). This inclusion was based on the increasing population, ever increasing housing deficit of 17 million estimated since August 2012 (World Bank 2013), and a stable economic environment that is capable of attracting and sustaining international investors for another 20 years. The residential real estate investment subsector drives Nigeria's real estate market given the high demand occasioned by inadequate supply resulting in the increasing housing deficit. According to National Bureau of Statistics (2015) the Nigerian real estate sector comprises about 7,343 establishments. The distribution shows that Lagos State and Abuja dominate the real estate market sector with Abuja having about 2,342 establishments (31.89%) and Lagos State with 1,677 (22.84%), resulting in a total of about 50% of the market. Rivers State particularly Port Harcourt and Kano are among the other states that also

have some level of appreciable real estate activities based on their high populations.

According to Emele, Okpaleke and Umeh (2014), the real estate industry in Nigeria has grown to become competitive because more investors are showing profound interest due to the creation of new products and expansion of investable high-grade real estate. Accordingly, the Nigerian real estate market as driven by regional markets in Lagos, Abuja, Port Harcourt and Kano is characterized by huge and rapid growth potential with boom in the various subsectors; positive correlation of economic growth with increase in real estate activities and expansion of the urban centres due to increasing population thereby leading to the creation of more neighbourhoods with increasing housing activity. However, sourcing of credit for real estate investment continues to be a great challenge although there is an increase in capital investment in real estate through inflow of funds from alternative channels; and a strong demand for real estate investment products occasioned by the emerging middle class although supply has not been commensurate with the level of demand, thereby creating a huge gap that needs urgent intervention. Despite the level of growth, a highly active market and increased volume of transactions in the Nigerian real estate market, there are elements of underdevelopment of the market when viewed from the perspectives of the four financial structures or four quadrant model of Hudson-Wilson, et al (2003) and that of Hoesli and Lekander (2008).

## **PROBLEM STATEMENT**

The Nigerian real estate market has evolved over the decades. This is evidenced by the volume of transactions in the market as well as the diverse nature of market participants and research in the various subsectors of the market. The depth and sophistication of the real estate market in Nigeria notwithstanding, the continued absence of a central databank which has limited the availability of data for investment performance analysis and indices construction for robust empirical research activities on performance of direct real estate has become a worrisome and recurring topical issue

that is yet to be resolved (Dugeri, 2008; Dugeri & Olaleye, 2008, Emele & Umeh, 2013).

Real estate performance evaluation has been identified as key benchmark in the rating of real estate markets across the globe in terms of their maturity levels and their abilities to attract world class investors and foreign direct investment. Thus, Diewert and Shimizu (2013) submit that the amount of funds that are invested in a real estate market is an indication of the level of maturity of that real estate market and represents a large portion of the output of a nation and therefore, real estate investment performance analysis and measurement should be based on the right and appropriate methodology. It is disheartening however, that the Nigerian real estate market continues to be excluded from international real estate investment performance rankings or where it is included, the ranking is normally very low as seen in Global Real Estate Transparency Index (2020). The reasons for this absence or low ranking as adduced by Akpan and Ogunba (2015) are related to the issues of market immaturity and low market transparency which are anchored on the absence of a performance indices recognised globally as well as real estate data issues. This therefore presents a problem and creates a research gap which has continued to widen despite the growth and sophistication, very rich academic research saturation of the market by renowned academics of global repute available in Nigeria and the vast opportunities available in the real estate market. This research therefore provides the answer to the research question: What are the problems and constraints encountered by real estate professionals in measuring real estate investment performance through a recognized performance measurement index? The key objective of this paper is to identify the main problems encountered by estate surveyors and valuation in the Nigerian market in measuring real estate investment performance through a recognized performance measurement index.

## **LITERATURE REVIEW**

Real estate market has been described by Makama and Ishaya, (2007) as the human interaction for the purpose of exchanging rights in real estate which is measured in terms of monetary value. Economically, the real estate market is a market where real estate resources are exchanged through the

forces of demand and supply (Maier & Herath, 2009), having a network of systems which are interconnected through the various mechanisms of the market in the allocation, usage, exchange, management, and development of spatial resources within the risk-return framework (Geipele & Kauškale, 2013; Kauškale & Geipele 2017) including other factors. These factors affect the functioning of the real estate market at different levels and degrees. Such factors are locational, demographic, socio-political, economic, legal, institutional and the global economic environment that form the mechanism within which the real estate market functions at the various levels, categories and types. As posited by Makama and Ishaya, (2007), the real estate market performs important roles such as spatial allocation of available and existing spaces to investors and users; expansion or contraction of space requirements through technological innovation in order to meet the challenges of the ever-dynamic investment and changing business conditions; and the determination of new investment and uses for land resources. Such important functions of the market need to be properly analysed, measured and documented. According to Nabarro and Key (2005), performance measurement in real estate forms an indicator that shows in empirical terms, the state of the market and among others:

- Raises the standard and quality of professional practice by creating standardization of the process of appraisals or valuations including the input variables thereby increasing the quality of valuations and increasing valuation accuracy, portfolio analysis and investment advisory, increases transparency of the valuation process, raises market confidence, and establishes benchmarks against which professional practice standard can be measured to determine when and at what level further improvements are needed. Real estate performance benchmarks and standardized provides the needed infrastructure for effectiveness and efficiency of the real estate markets by creating market associations that will monitor and enforce performance measurement codes, investor reporting standards and market driven indices for performance evaluation like what obtains in Europe for instance the European Public Real Estate Association (EPRA) and the European Association for Investors in Non-Listed Real Estate Vehicles (INREV) and the US National Association of Real Estate Investment Trusts (NAREIT).

- Aids the growth of real estate capital markets by broadening and deepening the real estate capital markets, identifying the risk factors, real estate credit cycles and how they can be mitigated. An obvious advantage of this is the widening of the real estate investment product offerings such as asset securitisation, Mortgage Backed Securities (MBS), property derivatives, futures etc. which provides a diverse range of investment options for institutional investors and also attract inflow of FDI in order to boost or recapitalize depressed markets and market cycles. In addition, real estate performance measurement acts as a market correction mechanism through which exposure of real estate investment to negative or bust real estate cycles can be easily detected and corrected by a means of accurate pricing of risks and diversification.
- Real estate performance measurement aids in the adaptation to emergent markets by contributing to the maturity of the market, establishing the metrics of the performance of the market as a whole. The emergent nature of real estate markets through performance measurement makes it easier for markets to develop gradually through a culture of sustained market performance analysis.
- In the context of portfolio management, real estate performance measurement according to Wyatt (1984), Green (1991), Hager and Lord (1985) and Ogunba (2013) enables:
  - a) maximisation of portfolio return,
  - b) tests the performance of funds against the overall market,
  - c) quantifies the rate of return on the total fund invested and also on asset to which funds were allocated,
  - d) comparative analysis of the returns of the portfolio against the market benchmark,
  - e) identifies the components of the total return to enable decisions relating to allocation of funds in the future,
  - f) identifies the managers who perform above targets when considered from the perspective of inflation and market dynamics in each investment category.

- g) analyse the impact of past investment decisions on the performance of the assets as a corrective or progressive activity and their impact on current performance results.
  - h) ensure that the investments meets creditors' requirements in terms of credit obligations and rating agencies requirement.
  - i) measure the performance of assets against inflation in order to select assets with good investment characteristics and fundamentals.
  - j) for comparative purposes either within the real estate portfolio or the combination of other assets within the portfolio across sectors and markets
  - k) for portfolio monitoring and planning to justify further investment and funding
  - l) measures the performance of the portfolio manager within the context of the risk-return framework as well as investment decision making abilities especially in volatile markets or during each economic cycle.
- In terms of the real estate investment managers, investors or owners, Geltner and Ling (2000, 2001) highlighted that the role of performance measurement include:
    - a) It clarifies the objectives of investments, strategies and tactics adopted by the real estate manager in meeting the requirements of the owner or investor thereby enhancing the communication between the manger as the agent and the owner/investor as the principal.
    - b) It helps to reduce or eliminate agency conflicts the agent-principal relationship when there is an alignment of the interest of both parties.
    - c) Performance measurement will help in exposing real estate investment managers that are not competent and eventually weed them out from participating actively in the real estate industry till when they improve on their expertise and skills through training.

## **Previous studies on real estate investment performance measurement in Nigeria**

Literature abounds on studies relating to real estate investment performance measurement carried out at different times, covering different periods, on different geographic locations, using different property types and combination, and for different purposes in the Nigerian market. However, none of these studies specifically examined the constraining factors and problems that affect the performance measurement of real estate investment using a recognized benchmark. There are only few studies that examined data issues in the Nigerian market which represent a fraction of the constraints. Such studies include Abere, Ogunba and Dugeri (2018) which evaluated the state of three property markets of Lagos, Ibadan and Oshogbo in Nigeria's South Western region in terms of their maturity level based on ten indicators, some of which have implications for performance evaluation of real estate.

The study finds that the markets were classified as emerging and immature at different levels of market maturity suggesting that real estate performance measurement is at the abysmal level. Olapade and Olaleye (2019) examined the factors affecting accessibility to property data in a non-transparent market. Identifying, 19 factors that affect property data accessibility, the factors were analyzed into six groups using principal component analysis which are economic factors, attitudinal factors, ethical factors, legal factors, administrative factors and technical factors and the extent of their effects in that order. A follow up study by Olapade and Olaleye (2018) on the possibility of data sharing among property professionals as a solution to the data challenge identified in the previous study finds that a greater percentage (68.1%) of the professionals are willing to share property data but when disaggregated, the bigger firms and the more experienced practitioners expressed aversion to data sharing and assemblage (68.1%) although a very high percentage (93.3%) supported the establishment of a central data base. This also shows that creation of a data base does not totally solve the problem. In another related study Olapade, Ekemode, and Olaleye (2019) investigated the considerations by real estate professionals for the design and management of real estate data bases, the study finds that



there are preferences for web-based databank which gives unhindered access to the data suppliers to the data bank, ensuring the security, standardization and professional management of the databank. These studies which identified data as a key challenge to performance measurement are in agreement with the current era of big data, artificial intelligence and data analytics.

Among the other Nigerian studies which focused on performance measurement, the following thematic groups can be identified:

- a) Textbooks which can be considered as the pioneering insight into real estate investment performance measurement issues and in building the consciousness of performance measurement, although the books dealt majorly on property investment, valuation and decision analysis and portfolio management which are the central themes in real estate investment analysis (Ajayi 1998, Kalu, 2001) and other textbooks that came up later such Ogunba (2013), Umeh and Mamuda (2020) and Otegbulu (2022).
- b) Studies that examined the performance of real estate investment in terms of the comparative analysis of direct real estate investment with other investment assets like common stocks or equities, real estate investment trust, and fixed income investment within the framework of risk, return and diversification potentials in mixed-asset or multi-asset portfolio (Bello, 2003; Olaleye et al, 2010; Bello, 2012; Ekemode & Olaleye, 2016); Oyewole 2019)
- c) Another group of studies focused on direct real estate which includes mainly residential and commercial real estate markets either in terms of the market performance separately or in the context of real estate only portfolio context (Olaleye, 2000; Udoetuk, 2008; Oyewole, 2013, Dabara, Ankeli, Odewande, Guyimu, & Adegbile, 2014; Anule & Umeh, 2016; Wahab, Morenikeji, Adeogun, Durosinmi & Shittu, 2017; Udobi, Onyejiaka & Nwozuzu, 2018; Diala, Nissi & Ezema, 2019; Nissi, Diala, & Ezema, 2019)
- d) The other group that examined only indirect real estate investment performance in comparison with other equities (Amidu & Aluko, 2006;

Amidu *et al*, 2008; Emele, 2010; Emele & Umeh, 2013; Amidu, Aluko, Nuhu, and Saibu, 2008; Umeh & Okonu, 2018)

Olowofeso, Bada, Bamanga, Bassey, and Dzaan (2012) is perhaps the only known indigenous study that focused mainly on the development of a real estate indices for the residential real estate market for Nigeria and attempted to construct real estate indices in Nigeria. These studies adopted different methodological approaches based on the level of data availability, covered several regional markets, sub-markets and property times and at different periods. However, the constraints against performance measurement of real estate investment have not been adequately addressed.

### **Constraints limiting the performance measurement of real estate investment in Nigeria**

According to Nabarro and Key (2005) and Arthur (2005) performance measurement in real estate poses peculiar challenges due to the nature and characteristics of real estate defined in terms of the lack of a central “trading floor” for real estate transactions, high illiquidity and heterogeneity of real estate markets, barriers to information flows and limited information. Arthur (2005) identifies that data remains the greatest challenge facing real estate investment performance measurement in every market although the case of the Nigerian market in data collection has been rather pathetic. According to Olowofeso, *et al* (2012), the challenges flow from the nature of real estate in terms of heterogeneity, the possibility of sudden fluctuation in price until sale is concluded and infrequent sale of properties. When viewed from the volume of activities in the market as stated by Emele, *et al* (2014), data on Nigerian real estate is available but the major problem has been that the market has high opacity which militates against efficient organization and gathering of the available data in a central data back for use by analyst and researchers. The structure of the professional firms is identified also as a big problem. Hager and Lord (1985) and Green (1991) identified the limiting factors of real estate performance measurement as valuation related which include valuation related challenges such valuation smoothing, bias, inconsistencies and inaccuracies; time lag between one valuation and another valuation as a result of infrequency of valuations that

can distort capital and income growth; differences in valuation opinions of real estate valuers; use of conservative valuation bases and approaches; timescale of purchase and sale of property which could distort the real estate market since there could be changes in economic variables thereby not properly reflecting the state of the real estate market adequately; lack of uniformity in the comparisons of the abilities of property managers; and the period of property performance measurement. From review of literature, it can be concluded that there is no framework for a uniform real estate performance evaluation available in the Nigerian market due to the constraining factors in the market.

## **METHODOLOGY**

The method adopted in this study is a questionnaire survey and the population of study is the real estate professionals in the Nigerian real estate industry which are the Estate Surveyors and Valuers, recognized by the enabling national law to carry out professional real estate investment services. They are organized under The Nigerian Institution of Estate Surveyors and Valuers (NIESV) and regulated by the government agency known as Estate Surveyors and Registration Board of Nigeria (ESVARBON). According to the Directory of Firm published on the website of NIESV, there are 1039 registered Estate Surveying and Valuation firms in Nigeria under which the Estate Surveyors and Valuers carry out their professional responsibilities. This therefore constitutes the population of study. From this population, a sample of approximately 400 firms was selected using the formula of Yamane (1967). The self-administered questionnaire administered on the sampled population is the instrument of data collection. On a general note, the questions were structured in the close ended questions type in the Likert-style opinion rating format. Out of 400 sampled first, 276 responded thereby giving a response rate of 69%. The collected data was statistically analysed using the mean score as the ranking criterion. The decision rule adopted in this study followed the framework used by Olaleye and Adebara (2019) in the interpretation of mean scores emanating from the rating and ranking of respondents opinions. Thus, for variables rated on a 5-point Likert scale, the mean scores were interpreted that the variable exists as follows:

1.00 – 1.49 ..... highly insufficient quantity and no impact  
 1.50–2.49....., insufficient quantity and makes minor impact  
 2.50 – 3.49....., somewhat sufficient quantity and noticeable impact.  
 3.50 – 4.49....., adequate quantity and a significant impact  
 4.50–5.00..... highly sufficient quantity and significant effect.  
 Similarly, for variables rated on a 4-point Likert scale:  
 1.0 – 1.49..... highly insufficient quantity and of none effect or impact.  
 1.50–2.49..... an insufficient quantity and therefore, has minor impact on the market.  
 2.50 – 3.49.....somewhat sufficient quantity to have noticeable impact on the market,  
 3.50 – 4.00....., a highly sufficient quantity to significantly affect the market.

**DATA ANALYSIS AND DISCUSSION**

**Table 1: Firms Information**

<b>Variable</b>	<b>Characteristics</b>	<b>Freq.</b>	<b>%</b>
Number of branches of the firm	None	82	29.7
	1 Branch	131	47.5
	2 - 3 Branch	49	17.8
	4 - 5 Branch	8	2.9
	6 - 10 Branch	4	1.4
	Above 10 Branches	2	0.7
Staff strength of the firm	1 - 5 Staff	137	49.6
	6 - 10 Staff	115	41.7
	11 - 15 Staff	12	4.3
	16 - 20 Staff	8	2.9
	Above 20 Staff	4	1.4
Age of the firm in years	0 - 10 years	32	11.6
	11 - 20 years	52	18.8
	21 - 30 year	171	62.0
	31 - 40 years	14	5.1
	Above 40 years	7	2.5
<b>Total</b>		<b>276</b>	<b>100</b>

Source: Field Survey (2022) N = 276

Characteristics of respondents' firms as shown in the table shows that that 82 (29.7%) of the firms had no branch office, 131(47.5%) had one branch, 49 (17.8%) two or three branches, 8(2.9%) four or five branches, 4(1.4%) six to ten branches and 2 (0.7%) had more than 10 branches. The shows that the firms are structured in a limited manner that they can hardly compete in world class real estate investment performance service delivery. Staff strength shows that 137(49.6%) had 1 - 5 Staff, 115 (41.7%) had 6 - 10 Staff, 12 (4.3%) had 11 - 15 Staff, 8 (2.9%) had 16 - 20 Staff and 4 (1.4%) of the firms had 20 Staff and above. Age of the firms shows that 32 (11.6%) were ten years old and below, 52(18.8%) 11 - 20 years, 171(62.0%) 21 - 30 years, 14(5.1%) 31 - 40 years and 7(2.5%) existed above 40 years.

**Table 2: Firm's Scope of Activities**

Scope of Activities	Mean Response Rating					
	Mean	SD	Category	RI	Rank	Remark
General real estate consultancy	4.96	0.316	5	1.75	1	High
Property Agency and management	4.53	0.617	5	1.60	2	High
Property portfolio investment /management	3.92	0.761	4	1.38	3	High
Valuation	3.35	1.113	3	1.18	4	High
Facility management	3.16	1.180	3	1.11	5	High
Real estate finance syndication	2.29	0.811	2	0.81	6	Low
Property development	2.13	1.610	2	0.75	7	Low
Project management and services	1.39	0.717	1	0.49	8	Low
Capital market advisory services	1.34	0.962	1	0.47	9	Low
Corporate real estate management (CREM)	1.31	0.593	1	0.46	10	Low
Firm's Scope of Activities	2.84	0.279	3	1.00		Low

Source: Field Survey (2022)

*N* = 276. *SD* = Standard Deviation, *RI* = Relative Index. Category: .A-Always (5) V-Very often (4) S-Sometimes (3) R-Rarely (2) N-Never (1). Scale Mean = 3.00.

Analysis of the result reveals that general real estate consultancy (4.96) and property agency and management (4.53) are the highest activities by the professional firms within the scale of 4.50–5.00, thereby in a highly sufficient quantity to significant effect performance measurement. Two factors, property portfolio investment /management (3.92) and valuation (3.35) occurred in adequate quantity and to impact significantly the market within the scale of 3.50 – 4.49. Facility management (3.16) within the scale of 2.50 – 3.49 was practiced in somewhat sufficient quantity and noticeable impact in the market. Others include real estate finance syndication (2.29) and property development (2.13) which occurred within the scale of 1.50–2.49 which were insufficiently practiced by the respondents and makes minor impact. The remaining three professional activities, project management and services (1.39), capital market advisory services (1.34), and corporate real estate management (CREM)(1.31) were highly insufficient with no effect on the market, scale of 1.00 – 1.49.

**Table 3: The problems and constraints encountered by real estate professionals and other stakeholders in measuring real estate investment performance**

S/No	Problems and Constraints	Mean Response Rating				
		Mean	SD	RI	Rank	Remark
1	Firm does not have a data unit that tracks market data.	3.79	0.537	1.37	1	High
2	Inadequate information about the real estate market	3.70	0.616	1.34	2	High
3	Lack of uniform performance measurement benchmark in the industry	3.46	1.035	1.25	3	High
4	Limited knowledge of the performance measures by practitioners	3.42	0.852	1.24	4	High
5	Limited investors' interest on investment performance measurement	3.41	0.884	1.23	5	High
6	Lack of specific performance measurement data in the market	3.38	0.896	1.22	6	High

7	Non –representativeness of performance measurement data	3.24	0.824	1.17	7	High
8	Lack of knowledge of methodologies and tools of measurement	3.19	0.920	1.15	8	High
9	Slow response of real estate investment dynamics to global standards	3.17	0.848	1.15	9	High
10	The level of importance attached to performance measurement	3.16	0.819	1.14	10	High
11	Low level of property market level analysis by practitioners	3.12	0.906	1.13	11	High
12	Valuation issues e.g. smoothing, bias, inaccuracies, methodology	3.04	0.875	1.10	12	High
13	Lack of specific training in real estate performance measurement	3.02	0.765	1.09	13	High
14	The structure of firms in the real estate industry	2.93	0.935	1.06	14	High
15	Limited patronage of performance measurement services by clients	2.29	1.089	0.83	15	Low
16	Poor understanding of the performance measures by clients	2.27	1.148	0.82	16	Low
17	Inability to capture and identify property and business cycles	2.06	1.072	0.75	17	Low
18	Limited growth of real estate market	1.77	1.101	0.64	18	Low
19	Performance measurement not a mandatory requirement by regulators	1.43	0.890	0.52	19	Low
20	Performance measures are difficult and time consuming to prepare	1.11	0.528	0.40	20	Low

21	Lack of performance measurement software for professionals	1.10	0.484	0.40	21	Low
	<b>Problems and constraints encountered in real estate</b>	<b>2.76</b>	<b>0.283</b>	<b>1.00</b>		<b>High</b>

Source: Field Survey (2022)

*N* = 276. *SD* = Standard Deviation, *RI* = Relative Index. Category: 4 = great extent (GE), 3 = somewhat (S), 2= very little (VL), 1 = not at all (N). Scale Mean = 2.50.

Analysis of the result shows that 2 factors (firm does not have a data unit that tracks market data and inadequate information about the real estate market) exists in highly sufficient quantity to significantly affect the market with mean scores of 3.79 and 3.70 respectively, above the 3.50 threshold.

Furthermore, 12 out of the factors are within the 2.50-3.39 scale which means that they exist in somewhat sufficient quantity to have noticeable impact on the performance measurement of the market. They are lack of uniform performance measurement benchmark in the industry (3.46), limited knowledge of the performance measures by practitioners (3.42), limited investors’ interest on investment performance measurement (3.41), lack of specific performance measurement data in the market (3.38), non – representativeness of performance measurement data (3.24), lack of knowledge of methodologies and tools of measurement (3.19), slow response of real estate investment dynamics to global standards (3.17), the level of importance attached to performance measurement (3.16), low level of property market level analysis by practitioners (3.12), valuation issues e.g. smoothing, bias, inaccuracies, methodology (3.04), lack of specific training in real estate performance measurement (3.02) and the structure of firms in the real estate industry (2.93)

Four variables that had a mean score in the range of 1.50–2.49 are in insufficient quantity and therefore has minor impact on the performance measurement of the market. These include llimited patronage of performance measurement services by clients (2.29), poor understanding of the performance measures by clients (2.27), and inability to capture and identify property and business cycles (2.06), limited growth of real estate market (1.77). The last set of variables occurred in highly insufficient



quantity and of none effect or impact by falling within the scale of 1.0 – 1.49. They include performance measurement not a mandatory requirement by regulators (1.43), performance measures are difficult and time consuming to prepare (1.11) and lack of performance measurement software for professionals (1.10). The participants indicated that the problems and constraints encountered by real estate professionals and other stakeholders in measuring real estate investment performance are have high influence on real estate investment performance with a mean response rating of  $2.76 > 2.50$  (scale mean).

## **CONCLUSION**

The result of this study has shown that the situation of real estate investment performance measurement in Nigeria is worrisome and exposes the huge gap in Nigerian real estate performance measurement research. This calls for concerted and intense research activities in real estate investment performance management and evaluation. Previous studies have centered on data availability but this study has shown that although data is key, other variables have significant impact on the performance measurement of real estate in Nigeria. Considering the attention given to real estate investment performance measurement by the public authorities, financing institutions, investors (international, institutional, corporate and individual) and academics, there is an urgent for intervention in the Nigerian market to bridge this gap that has defied solution over the years despite an avalanche of literature on real estate investment performance analysis available. Therefore, the NIESV and its regulator, the ESVARBON should take the initiative by creating an online based micro-real estate specific information and data supplied by professionals in every local market that will enable development of a real estate performance indices for each real estate sub-market, each region and the entire country in general to culminate in national real estate indices. Collaboration with the private sector and institutional investors particular will open up investment opportunities in data analytics which currently offers new sets of specialist skills.

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