

*Relationship with other students*

- 30. I feel a strong sense of belonging to my class group.
- 31. I frequently work together with others in my classes.

*Cooperative learning*

- 32. I have frequently discussed ideas from courses with other students out-of-class.
- 33. I have found that discussing course material with other students outside classes has helped me to reach a better understanding of the material.

*Coherence of curriculum*

- 34. I can see how courses fitted together to make a coherent program of study for my major.
- 35. The program of study for my major was well integrated.
- ... ..
- 36. Overall, I am satisfied with the quality of the course.

Thank You

# REAL ESTATE INVESTMENT TRUSTS (REITS) INDUSTRY IN NIGERIA: THE INFLUENCE OF EXTERNAL FACTORS ON RETURNS

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## Abstract

**Purpose** – The purpose of this paper is to examine the effect of operating environment factors on the performance of Real Estate Investment Trusts (REITs) in Nigeria.

**Design/Methodology** – A questionnaire based survey research method was adopted for the study. Descriptive statistics and correlation matrix analyses were used to investigate the significance contribution Political Leadership, Investors Perception, Infrastructure and Social Security to REIT dividend based performance.

**Findings** – The study found that there is significant correlation among Political Leadership, Infrastructure and Social Security while Investors Perception exhibits non-significant correlation with any other factor. The performance of REIT in term of dividend distribution is low in Nigeria with loss in capital value over the period of study. The external factors have effect on REIT performance.

**Practical Implications** – Most studies have examined the effects of economic factors such as size, FFO, NAV, Market Index etc, on REIT dividend performance. This study will be useful to Industry players especially fund managers on the possible effects of external factors on REIT performance in order to take right decision on locations to invest especially in this era of globalisation.

**Originality/Value of Work** – The paper contributes to the body of knowledge on REIT with its special focus on external factors influences on REIT dividend performance in the developing nations like Nigeria, where the operating environment is characterised with peculiar challenges of paucity of property stocks and high external factor risk.

**Keywords** – REITs, Returns, Performance, Influence, External Factors

**Paper Type** – Research Paper

## Introduction

Real Estate Investment Trust (REIT) has become a popular investment tool in real estate sector since its introduction in the United States of America (USA) in 1960. Similar to a close end funds, REITs offer investments opportunity of participating in real estate sector through property related securities (Chang, Chou, & Fung, 2012; Sah & Seagraves, 2012). Cummings (2008) categorised REITs with lending financial institutions as a prime source for funds to real estate though with remote and distance access. Chang et al. (2012) stated that REITs are issued by Financial Institutions responsible for pooling funds together and investing the fund in real estate asset, paying dividend to unit holders from income generated from the real estate assets.

Various studies related to REIT performance in terms of dividend return has identified two broad categories of factors affecting investment generally and which can be extended to REITs. Baum and Murray (2010) classified the factors into formal and informal. Formal factors are economic attributes while informal factors are socio-political or what can be regarded as operating environment factors. In this paper, the factors are classified into internal and external. Internal factors are relating to economic attributes of NAV, FFO, Size, Unit Share Price, Leverage, Asset Value and Investment Diversification. The external factors are of the operating environment (socio-political) attributes including political (leadership) risk, social security, infrastructure and investors' behaviour.

As a result of global acceptance and adoption of REITs as the primary vehicle for indirect property investment for both the private and institutional investors, REIT came into existence in Nigeria in 2007 with the listing of NGN2bn Skye Shelter Fund followed by the NGN50bn Union Homes Hybrid REIT in 2008 in accordance with the provision of Investment and Securities Act (ISA), 2007 and in line with guidelines set by the Securities and Exchange Commission (SEC) and The Nigerian Stock Exchange (NSE). However the performance of Nigeria REIT over the period (2007-2013) in terms of dividend to investors and capital appreciation has not been encouraging. There have been loss of capital over the period. The REIT stock is gradually regaining price stability as Skye Shelter Fund has maintained its 2007 IPO price of NGN100.00 and the Union Homes REIT with its current share price of NGN47.59 almost bounced back to the 2008 IPO price of NGN51.50 (as at April, 2014). Although Nigeria REIT (N-REIT) came into existence in the heat of the global financial crisis (2007-2008), most markets have since 2009 started recovery from the shock of the global economic crisis. The number of listed REIT companies is also a reflection of the growth of REIT as an investment vehicle in Nigerian capital market. Only two (2) REITs were listed in Nigeria capital market until February, 2013 when the 3<sup>rd</sup> REIT - UPDC REIT launched its IPO. The question then arises, what are the challenges confronting REIT performance and growth in Nigeria?

Internal factors contributions have been explored in most REIT markets (Newell, 2008; Ong, The, & Chong, 2011; Sing, 2005; Ting & Mohd, 2007) and little studies have related REIT dividend return performance to external factors (Baum & Murray, 2010; Daud, Mohd Ali, Sipan, & Wilson, 2012). Again no study of REIT performance has focused on Nigeria market. This paper intend to fill this gap. The study also play useful role towards investors' and fund managers' decision on REIT's fund investment taken into account the influence of the external factors in various market on REIT performance.

## Background

Real Estate Investment Trust (REIT) as a creation of United States (US) congress through REIT legislation in 1960 has been accepted globally. Following REIT evolution in the USA is Australian REIT in 1971 in form of Listed Property Fund (LPF). REIT in Asian market in the modern form came after the 1997 Asia Financial Crisis with Japan been the pioneer in Asian REIT market. However, Malaysia has operated listed property fund since 1989 but transformed to modern REIT in 2005. Singapore REIT, the second largest in Asia came into existence in 2002. REIT in United Kingdom (UK) and Germany was in 2007. In Africa, REIT came into existence in 1994 in Ghana. South Africa in 2002 established REIT like instruments, in form of Property Unit Trust (PUT) and Property Loans Stock (PLS) company (Mathibe, 2012). The recent REIT legislation in South Africa which came into effect on 1<sup>st</sup> April, 2013 is to transform the listed fund (PUT) to modern REIT and grow the property market (Smith, 2013).

REIT took the centre stage in Nigeria following the issuance of guidelines for registration and requirement for operations by the Securities and Exchange Commission (SEC) in 2007 (Oreagba, 2010). The first listed REIT in Nigeria is the NGN2bn Skye Shelter Fund which launched its IPO on 23<sup>rd</sup> July, 2007 and officially listed on 28 February, 2008. The NGN50bn Union Homes Hybrid REIT was launched in September, 2008 and the third REIT in Nigeria, UPDC REIT launched its IPO on February 18, 2013. The adoption of REIT in Nigeria has been greeted with mix fortune in term of performance. Skye Shelter REIT declared dividend for the period 2008-2012 and gained 5.7% and 3% in 2008 and 2011 in term of share price appreciation. Union Homes REIT has consistently experience a loss scenario from its listing day (Fig. 1). However there is a steady recovery in share price from end of 2013 with Skye Shelter maintaining its IPO price of NGN100 and Union Homes REIT trading at NGN47.59 as at April 2014.

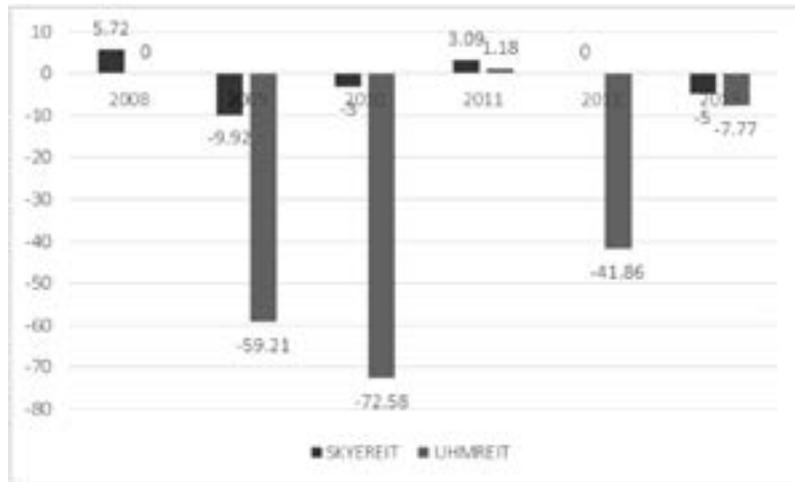


Figure 1: % change in N-REITs unit prices between 2008 and 2013

It took seven (7) years before Nigeria can have three (3) listed REIT and five (5) years from the listing date of the second REIT. However other real estate investment opportunity of direct real estate such as property development companies and savings & loans companies are numerous.

## Nigeria Investment Market Characteristics

The Jones Lang Lasalle (JLL) Global Real Estate Transparency Report, 2014 ranked Nigeria among the top 10 improvers markets (and among the top 5 improvers from Sub-Saharan Africa). The Nigeria investment market do give quantum of return on investment. MTN Group, a South Africa based multinational mobile telecommunication company (MTN) prior to its investment in Nigeria (through MTN Nigeria Communications Limited) was number 3 mobile telephone operator in South Africa, the return from Nigeria market has made MTN the biggest phone operator in Africa. Similarly Shoprite, a South Africa retailer entered Nigeria market about 10 years ago and has become successful and plans to have 44 retail outlets in addition to the existing 7 within the next 4 years (David, 2014). The Nigeria Gross Domestic Product (GDP) grew at 7.9% between 1999 and 2012. Recently, Nigeria was declared the largest economy in Africa taking the lead from South Africa with a GDP per capital growth from US\$700 to US\$1,725 (Khan, 2014). Nigeria is also a potential destination for Foreign Direct Investment (FDI). Baum (2006) admitted that investing in property is difficult because of illiquidity nature and huge capital

requirement. REIT however posit good medium for FDI into emerging economies for easy fund investment in real estate. Baum (2008) and Laposa (2007) concluded that FDI constitute a major source of financing domestic property market through cross-border investment, supplying indirect finance to property sector through capital market from developed countries to developing economies and their emerging property markets. Nigeria market attracted over US\$20bn in FDI between 2010 and 2013 (David, 2014), but the proportion of this sum to real estate sector is not available. Baum (2008) found that population and GDP per capital constitute the attracting variables for FDI. The study predicted 3 funds for Nigeria economy while observed data show that no fund is interested in Nigeria market.

Nigeria is the 9<sup>th</sup> most populous country in the world, a good population to support investment in real estate due to increase demand for housing and other types of real properties. In term of GDP per capital, Nigeria is ranked 136 out of the 180 emerging markets studied by Baum (2008), a discouraging factor to FDI. He reiterated that political risk may explain shortage of investment funds in emerging economies. Nonetheless, the reality of the Nigeria market is that there is quantum of return on investment (David, 2014). Despite the growth of the Nigeria economy, a large number of its citizen are unemployed, a good explanation for its GDP per capital. Poor infrastructure is another problem in terms of transportation network, electricity and social security. The mass transit rail system is struggling to come back while there is no good road network. The power system almost gone comatose, generating less than 4000MW for the estimated 170 million people while Malaysia with about 30million population generates above 28,000MW of electricity. South African has 35,200MW and Ghana not too long ago celebrated 10 years of uninterrupted power supply. The current government commitment to a private sector led reformation and transformation of Nigeria infrastructure provision is expected to yield good results. The position of Nigeria in the global economic terrain is another possible factor for concern. **Doing Business report** ranked Nigeria 147 out of 189 countries, **Economic Freedom** placed the country at 129 out of 175 nations and **Transparency International (T.I)**, a corruption watchdog in her 2013 **Corruption Perception Index (CPI)** ranked Nigeria 144 out of 177 countries (David, 2014). Against all these, Nigeria still presents a chance for a willing, daring and compelling investor. Nigeria is one of the fast growing economies and a regional hub of attraction for international commercial property investors in Africa.

## REIT Performance Analysis

Performance measurement is the process of ascertaining the degree at which organizational goals are met and how they are met (Lee, Gregory, & Platts, 2005). Performance measurement can be viewed from various perspectives such as quality service, customer satisfaction, cost efficiency, or income and return generation (Kotler, 1984; Neely, 1994; Slack, 1991). Investment performance measurement and analysis focused on how much does it cost to provide a service and how much

benefit is derived from the service/product provided. The difference between the cost and benefit is then analysed to assess the actual performance of the investment. The system of performance measurement explores issues such as internal, external, financial and non-financial to arrive at judgments (Kaplan & Schwartz, 1995; Lee et al., 2005).

REIT performance can be literarily explained in terms of its operational success which is revealed in its profitability to the investors. Returns from REITs are primarily derived from dividend yield and share price appreciation of the units. REIT markets have proved extremely successful in U.S. and Australia, as well as REIT markets in Asia and in Europe (Hoesli & Lizieri, 2007). Most REITs invest in income generating real estate assets, most especially commercial properties – office and retail properties. The recent trends however show that REIT fund are invested in healthcare and hospitality facilities as well as high rise income yielding residential properties, industrial and agricultural properties.

In general, the performance of REITs are mainly determined by the types of investment the companies make, which is basically divided into Equity REIT, Mortgage REIT and hybrid REIT (Grupe & DiRocco, 1999). Dividend distribution to investors is thus a measure of performance of REIT as it is for any other investment in the stock/capital market and could be measured in percentages (%) or money units (e.g Naira or Rands).

## Factors Affecting REIT Performance

There are lots of studies on the measurement of REIT performance across the global REIT markets. Past studies have identified two main factors affecting investment generally and REITs in particular. Baum and Murray (2010) classified the factors into formal and informal. Formal factors are internal investment economic variables that can predict and are used to assess investment performance. They are NAV, FFO, Size, Unit Share Price, Leverage, Asset Value and Investment Diversification. The informal factors are external operating environment factors that are not under the direct control of investment market but affect investment performance such as political (leadership) risk, social security, infrastructure and investors' behaviour. Chan et.al, 2003 added management style as another factor. While a lot of studies have been done on the effect and contribution of internal (formal) factors (Hwa & Abdul Rahman, 2007; Newell, 2008; Ong et al., 2011; Sing, 2005), little has talked about external factors effect on REIT performance (Baum & Murray, 2010; Daud et al., 2012).

### Internal Factors

Studies on the effect/impact of internal factors have clearly identified five variables including the Net Asset Value (NAV), Size (in term of capitalization), Funds From Operation – FFO (in term of net income), Leverage (Gearing/Loan) and As-

set Value (Market value of the underlying real estate assets) as predicting factors of REIT performance albeit mix and contradictory findings. Extensive studies had been done on the internal variables and REIT performance based on various methodologies. Some carried out the REIT volatility studies and compare with Risk ratio like Sharpe or Treynor while others use correlational studies of REIT performance with market indices like S&P500, KLCI, ASI, NSE300 etc. Yong, Allen, and Lim (2009) using a multi-factor approach to analyse Australian REIT (A-REIT) returns identified size (in terms of capitalisation), degree of leverage (Gearing) and market-to-book (Value) ratio among others as the determinant of REIT returns.

For the size (capitalisation), studies had suggested that there is an inverse relationship between returns and size implying that smaller REITs tend to yield more return than the larger REITs (Yong et al., 2009). Chaudhry, Maheshwari, and Webb (2004) and Hamelink and Hoesli (2004) stated that Larger REITs are found to be more geographically diversified but less diversified across property types and this could result in negative relationship of size to return. Yong et al. (2009) found and concluded that size factor had a negative impact on return and was only found to be a determinant of returns before 1996 (prior to Asia financial crisis of 1997). Alias and Soi Tho (2011) agreed with Ambrose and Linneman (2001) and stated that there is a positive relationship among REIT size, Revenue and Profit. The larger the size, the higher the rental income and profit margin therefore the better the yield. Brounen and Sjoerd (2012) attributed REIT stock outperformance in Europe to size, specialisation and geographic focus. Sing (2005) concluded that positive economies of scale effects can be achieved by larger asset size but its efficiency may also diminish when the span of control is exceeded.

The degree of influence of leverage on returns was found to be significant. Leverage magnifies both positive and negative investment returns, resulting in pronounced gain and losses (Allen, Madura, & Springer, 2000). From the study, more leveraged REITs are more sensitive to macroeconomic factors. A short term interest rate has inverse relationship with return while a long term interest rate posits a positive relationship. Delcoure and Dickens (2004) agreed with Allen et al. (2000) that a short term interest rate has negative relationship with return while long term interest has positive relationship with return. However Ratcliffe and Dimowski (2007) in their study of a sample in Australian found a contrasting result that there is a significant negative relationship between long term interest rates and returns, with a positive insignificant relationship with short term interest rates.

The market-to-book ratio was also found to have positive relationship with returns significant only at 1%. This however contradicted the negative relationship between size and returns of Yong et al. (2009). The significance of the value stock has been increasing for REITs since 1990 and plays an important role in diversification of REITs across continents rather than across countries (Hamelink & Hoesli, 2004). Stocks with high market-to-book ratio are regarded as growth stock while those with low market-to-book value ratios are value stocks.

Alias and Soi Tho (2011) in a study of REIT performance analysis, comparing M-REITs and UK-REITs found that the total revenue (in terms of income from property assets, capital appreciation and gains) contributes significantly to the performance of largest M-REIT and UK-REIT. Hwa and Abdul Rahman (2007) studied stability of dividend and FFO (fund from operation) in Malaysia, they concluded that the dividend (return) declared by REITs/Listed Property Trusts are not stable because it is affected by the net income from the underlying property assets. Their finding is supported by Alias and Soi Tho (2011). Gore and Stott (1998) found that FFO is more closely related to stock returns, Hardin III and Hill (2008) stated that excess dividends are a function of a firm's capacity to generate FFO, a view that was supported by Feng, Price, and Sirmans (2011). Fields, Rangan, and Thiagarajan (1998) on the contrary concluded that the REIT industry's claim of FFO superiority is premature. Bradley, Capozza, and Seguin (1998) examined cash flow volatility and dividend pay-out and concluded that there is a negative relationship between cash flow volatility and dividend level. Alias and Soi Tho (2011) concluded that FFOs are in turn affected by other economic factors and recommend that a detailed study has to be carried out before generalising on the factors affecting REITs performance

Ong et al. (2011) studied the performance of Malaysian REITs from 2005 – 2010 using Net Annual Value (per unit). An investment that trade at a market price that is below the NAV is perceived to have positive growth potentials while one with market price above NAV signals to investors, a negative growth opportunities for the REIT. NAV is a function of the net market value of the underlying real property assets of the REIT Company spread over the total outstanding units of the REIT Company. Clayton, Eigholtz, Geltner, and Miller (2007) stated that NAV is one of the three REIT valuation methods. Hua (2001) and David & Andy (2003) affirmed the use of NAV to measure per share of company's net asset market value which is then compare with the share price of the company to determine performance.

### **External Factors**

Studies has also confirmed that performance of real estate securities exhibits abnormal returns in international real estate markets. It is also established that substantial returns exist across different markets and over different periods (Abdullah & Wan Zahari, 2008; Amidu, Aluko, Nuhu, & Saibu, 2008; Bond, Karolyi, & Sanders, 2003; Ong, The, Soh, & Yan, 2012). The mixed findings of researchers about the effect and contributions of internal factors to REIT performance as discussed above clearly show that there are some other factors outside investment variable that could affect REIT return. Daud et al. (2012) studied the impact of location attributes on REIT return. Their finding revealed a strong correlation between location attributes and REIT return. The argument is supported with the fact that REIT return is strongly determined by income from properties (FFO) (Alias & Soi Tho, 2011; Gore & Stott, 1998; Hwa & Abdul Rahman, 2007). Any factor that affects property income could regress or enhance REIT return. Daud et al. (2012) adopted

the Multiple Regression Analysis which took into consideration, the significant effect of each of the location attributes. However, location is just one of the external factors that could impact on REIT return. Baum and Murray (2010) and Daud et al. (2012) identified Political risk, cultural risk, security, infrastructure and investors behaviour as informal factors affecting investment performance. David (2014) and Khan (2014) listed unemployment and transparency in addition to security and infrastructure.

Investors' sentiment has been identified as a factor in REIT performance (return). Investors are of two kinds, individual and institutional. While the individual investors may not have any significant effect on REIT stock prices and return, institutional investors have significant effect on REIT stock prices and performance (Chan, Erickson, & Wang, 2003). Institutional investors because of their voting power and knowledge of the market, do monitor the investment performance and decision of any corporation they invested so much in. REITs that have a reputable institutional investor on its shareholders book enjoys credibility and confidence of other investors including individual investors. Investment decision of the investors (including institutional investor) depends on their perception of the investment and assessment of the investment share price. Information that are available to investors and their mood is likely to cause a change in market scenario as a whole and impact on investment performance (Hiriyappa, 2008). Chan et al. (2003) restated their observation of the REIT stock market players that institutional investors can affect REIT return. It was found by Badrinath, Kale, and Noe (1995) that a portfolio of stocks that have highest concentration of institutional investors yield a higher return than those with low number of institutional investors. A positive and strong relationship exists between institutional ownership and stocks (Nofsinger & Sias, 1999). Chan et.al. (2003) posits that price setting of stocks greatly influenced by institutional investors because they are more sophisticated and knowledgeable of the market than the individual investors. The size of institutional investors' holding in REITs is increasing over time and this portend a direction towards more efficient REIT market in the future. The trend however shows that REITs with potential growth (traded in discount) is more preferable to institutional investors). The influence of institutional investor on the first day return of REIT initial price offer (IPO) was found to be positive by Wang, Chan, and Gau (1992). Chan, Leung, and Wang (2001) found that the negative Monday return theory does not apply to REIT stocks that have more reputable institutional investors. Wang, Erickson, Gau, and Chan (1995) posits that low institutional holding REITs underperform the stock market. The study revealed a significant positive correlation of performance to number of analysts. A high level institutional holding REIT will have a great number of analysts which in turn have positive effect on REIT performance. Downs (1998) study the effect of 5/50REIT industry regulation and stated that the rule constitute a limiting factor for institutional investors in holding REIT stock. The US congress relaxation of the 5/50rule has encouraged participation of institutional investors in REIT stock. Malaysia REIT was considered to be small cap and institutional investors were limited to invest in the market (Ong et.al., 2011).

The recent trend of insecurity as a result of the terrorist insurgency is another worry for risk averse investors. The September 11 bombing of World Trade Centre in America in 2001 resulted in a recess in the Dubai fast growing real estate sector before it regains its track in 2004 and after the 2007 global economic crisis. The Boko Haram treat to national security in Nigeria is a great challenge to a profitable real estate investment in many viable cities. Nevertheless, the relationship and association between external factors and REIT performance has been scantily reported.

## Management

Management style or what Chan et al. (2003) refers to as advisor puzzle is another factor that affect REIT performance in term of dividend return. The management style of REIT could be external (outsourced/consultancy) or internal (in-house). Before 1986, the REIT legislation made REIT manager to be externally sourced. This was because REIT was envisioned similar to mutual funds as a passive investment vehicles (Chan et al., 2003). The amendment of the tax code in 1986 by the US congress allows internal management of REIT portfolio. Despite the provisions of the Tax Reform Act that allows for direct management and selection of investment by REITs, there are still some REITs that are externally managed. Thus there exists both internally and externally managed REITs. In the period 1990-1996, the externally managed REIT were seen to be aggressive in the pursuance of growth strategies through property development and acquisition (Ambrose & Linneman, 2001). Howe and Shilling (1990) reported that all externally managed REIT under their study perform badly and worse than stock market. The REIT that were managed by high profile well known external managers do better than not too well known external managers. This is adduced to the keeping of integrity and reputation by the well known external managers. Cannon and Vogt (1995) in a study of 42 firms as sample over the period 1987 – 1992 found that REITs that are internally managed performs better than externally managed REIT. Capozza and Seguin (1998) also found a similar result with a sample of 75 REITs and gave a 7% outperformance rate for internally managed REITs over the externally managed REITs. Golec (1994) finds the reward system to the manager as a factor that affects return and performance. An external manager is paid a compensation for his services in form of fee, a formula based compensation/remuneration plan and this result in cash outflow. An internal manager on the other hand is paid a discretionary based remuneration (in form of salary), though the REIT Board of Directors can give bonus incentive. Therefore external manager becomes more expensive and are paid more, which reduces the profit of the company.

## Method and Data Collection

Amidu et.al (2008) studied the comparative performance of real estate securities and other securities in Nigeria Capital Market using the annual opening and

closing prices of shares and dividend data for seven top rated companies of the designated seven sectors in the market. While they acknowledged past studies on REIT performance, no REIT Company was included in their study because REIT was just introduced to Nigeria market. The only property development company that was included is the UACN Property Development Company (UPDC) Plc. UPDC established the 3rd REIT Company in Nigeria in 2013.

Against the focus of past studies on the stock market data and indexes, this paper focused on the external factors of political leadership, investors' perception, infrastructure, and security on REIT performance. The study adopted a questionnaire survey approach and used descriptive statistics and correlation matrix to analyse the responses to investigate the effect of external factors on REIT performance in the Nigeria market. Each of the main external factors has different number of sub-factors (items) to measure their respective influence on the dependent variable and a correlation matrix was used to identify the significance of the influence of these sub-factors. 120 questionnaires were administered to the sampled stakeholders who are the estate valuers, stockbrokers and shareholders randomly. 83 were filled and returned and 6 were discarded for incompleteness leaving 77 (64.2%) for analysis. The questionnaire contained series of statement with options for the respondents to indicate their level of agreement, measured on a 5-point Likert scale of ranking. The ranking ascribed 5 point to Strongly Agree, 4 point to Agree, 3 point to Undecided/Indifference, 2 point to Disagree and 1 point to Strongly Disagree. The data is an ordinal data.

## Data Analysis and Result

The instrument of survey was tested for reliability and validity. The Cronbach's Alpha for internal consistency of the survey instrument in respect of the sub-factors of main external factors is 0.7. This value falls within the reliability value of 0.65 – 0.95 at  $P < 0.05$  (Table 1). The instrument is adjudged reliable for the study.

**Table 1: Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .700             | .670   | 15         |

Discriminant validity test using non parametric correlation among the factors confirmed the validity of the instrument. The inter correlations among the factors are less than 0.85. There is no multi-collinearity problem with the data (Table 2).

**Table 2: Correlations for Validity test of the Survey Instrument.**

|                         |                         | Political Leadership | Investors Perception | Social Amenities | Social Security |
|-------------------------|-------------------------|----------------------|----------------------|------------------|-----------------|
| <b>SPEARMAN'S RHO</b>   | Political Leadership    | 1.000                | -.167                | .511**           | .549**          |
|                         | Correlation Coefficient |                      |                      |                  |                 |
|                         | Sig. (2-tailed)         |                      | .146                 | .000             | .000            |
|                         | N                       | 77                   | 77                   | 77               | 77              |
|                         | Investors Perception    | -.167                | 1.000                | -.061            | .000            |
|                         | Correlation Coefficient |                      |                      |                  |                 |
|                         | Sig. (2-tailed)         | .146                 |                      | .599             | 1.000           |
|                         | N                       | 77                   | 77                   | 77               | 77              |
|                         | Social Amenities        | .511**               | -.061                | 1.000            | .607**          |
|                         | Correlation Coefficient |                      |                      |                  |                 |
|                         | Sig. (2-tailed)         | .000                 | .599                 |                  | .000            |
|                         | N                       | 77                   | 77                   | 77               | 77              |
| Social Security         | .549**                  | .000                 | .607**               | 1.000            |                 |
| Correlation Coefficient |                         |                      |                      |                  |                 |
| Sig. (2-tailed)         | .000                    | 1.000                | .000                 |                  |                 |
| N                       | 77                      | 77                   | 77                   | 77               |                 |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The KMO and Bartlett's test also confirm sample adequacy with KMO value of 0.667 while the Bartlett's show significance at P < 0.05 (Table 3)

**Table 3: KMO and Bartlett's Test**

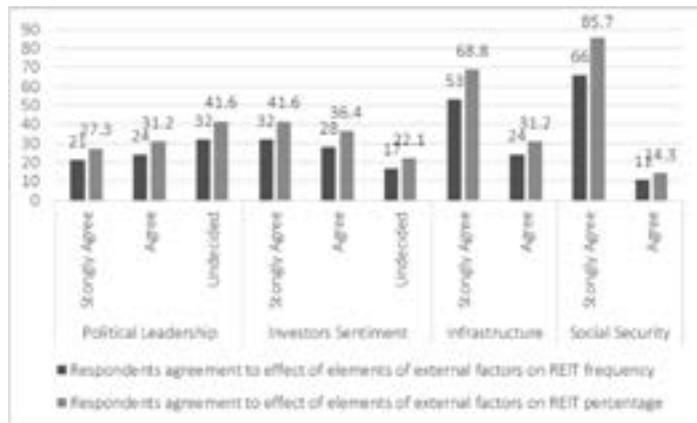
|  |        |
|--|--------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .667   |
| Approx. Chi-Square                               | 71.590 |
| Bartlett's Test of Sphericity                    | Df     |
|  | 6      |
|  | Sig.   |
|  | .000   |

Table 4 presents the demographic characteristics of the respondents. 96% ages 31 years and above and 59.6% are real estate professionals. 83% possesses between Bachelor and Doctorate degrees in their various discipline. 92% have more than 5 years working experience as practitioners with designation of manager to chief executive (Head of Practice). 79% are fully aware of REIT as a real estate investment vehicle. The characteristics of the respondents suggest that the respondents are knowledgeable and experienced to give reliable data/information for the study.

**Table 4: Demographic characteristics of the respondents**

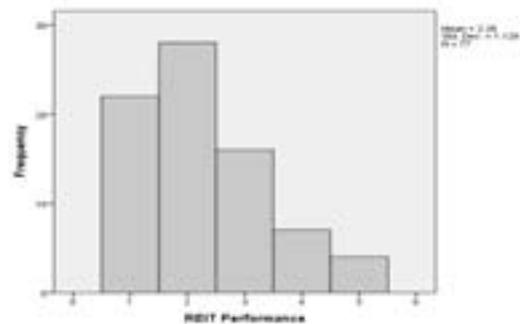
|                 |                     | frequency | Percentage |
|-----------------|---------------------|-----------|------------|
| Age             | 21-30 yrs           | 3         | 3.9        |
|                 | 31-40 yrs           | 15        | 19.5       |
|                 | 41-50 yrs           | 48        | 62.3       |
|                 | 51-60 yrs           | 11        | 14.3       |
|                 | Total               | 77        | 100        |
| Profession      | Real Estate         | 46        | 59.7       |
|                 | Non Real Estate     | 31        | 40.3       |
|                 | Total               | 77        | 100        |
| Qualification   | Diploma/Cert        | 13        | 16.9       |
|                 | Bachelor Degree     | 16        | 20.8       |
|                 | Master Degree       | 34        | 44.1       |
|                 | Doctorate           | 14        | 18.2       |
|                 | Total               | 77        | 100        |
| Work Experience | 1-5 yrs             | 6         | 7.8        |
|                 | 6-10 yrs            | 5         | 6.5        |
|                 | 11-15 yrs           | 25        | 32.5       |
|                 | 16-20 yrs           | 30        | 39         |
|                 | above 20 yrs        | 11        | 14.3       |
|                 | Total               | 77        | 100        |
| Designation     | Manager/Snr manager | 27        | 35.1       |
|                 | AGM/Gen Manager     | 5         | 6.5        |
|                 | Director/Executive  | 4         | 5.2        |
|                 | MD/CEO/COO/HOP      | 41        | 53.2       |
|                 | Total               | 77        | 100        |
| REIT Awareness  | Strongly Aware      | 16        | 20.8       |
|                 | Aware               | 45        | 58.4       |
|                 | Undecided           | 3         | 3.9        |
|                 | Unaware             | 8         | 10.4       |
|                 | Strongly unaware    | 5         | 6.5        |
| Total           | 77                  | 100       |            |

Figure 2 is the frequency and percentage distribution of the respondents' agreement to the effect of the external factors on REIT performance in Nigeria. 58.5% agreed that political leadership affects REIT performance and 41.6% were undecided. 78% agreed that investors' sentiment also have effect on REIT performance and 22% were undecided. The respondents (100%) agreed that infrastructure and social security has effect on REIT performance. This suggest that all the elements of external factors studied affect REIT performance with political leadership having least, but significant effect (58%).



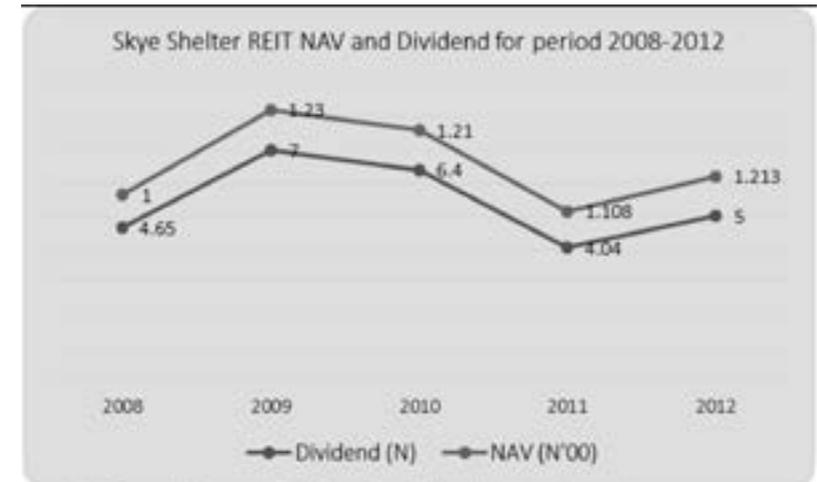
**Figure 2: Respondents agreement to effect of external factors on REIT**

From figure 3 the mean score (2.26) of the response to the level of agreement of REIT performance indicates that REIT performance in Nigeria is low. The respondent were to indicate their agreement to a statement that REIT performance is high. The histogram show the distribution of the responses.



**Figure 3: Histogram distribution of REIT Performance in Nigeria**

Figure 4 is the graph of dividend distribution and NAV for Skye Shelter REIT for the period 2008 – 2012. The graph shows a direct relationship between NAV and dividend. This agreed with past studies (Ong et al, 2011) that a higher NAV above unit price signify a growth stock and an indication of good performance.



**Figure 4: (Source: Authors compilation from Skye Shelter REIT annual reports)**

There is positive significant correlation among Political leadership, infrastructure and security. Investors' perception exhibits low and non-significant relationship with any other factor (Table 2). This means that investors' perception is not related to any other factor. However a change in any of the other three factors will in turn affect the remaining two and impact on REITs. A good political leadership will lead to good infrastructure and social security and vice versa. In table 2 above, the correlation among the positively related three factors are coloured green while the correlation between investors' perception and other factors are coloured red for easy comprehension.

Table 5 shows the correlation between REIT performance and the elements of external factors. Only terrorism has a significant correlation with REIT performance with a correlation coefficient of -0.248 (-24.8%). Political violence, protest, policy and transparency also have negative correlation with REIT but not significant. This suggest that the leadership policy in terms of fiscal, regulation and framework is not favourable to REIT growth in Nigeria. As reported by different economic transparency report (J. L. L., 2014; T.I., 2013), Nigeria economy is not transparent, this is exerting a negative effect on REIT performance, growth and development in Nigeria. The acceptability and willingness of investors towards REIT as an investment option show positive but insignificant correlation to REIT performance. All the

items under infrastructure have low insignificant positive correlation. The positive correlation can be attributed to the recent effort of the government to improve infrastructure through privatisation as seen in the power sector following the success been recorded in the telecommunication sector.

**Table 5: Correlations between REIT performance and Sub-factors**

| Main External Factors | Sub-factors          | REIT Performance |   |   |
|-----------------------|----------------------|------------------|---|---|
| Spearman's rho        | Political Leadership | Leadership       | Correlation Coefficient: 0.480<br>Sig. (2-tailed): .223<br>N: 77  |   |
|                       |                      | Policy           | Correlation Coefficient: -0.070<br>Sig. (2-tailed): .543<br>N: 77 |   |
|                       |                      |                  | Fiscal  | Correlation Coefficient: 0.022<br>Sig. (2-tailed): .851<br>N: 77  |
|                       | Investors' Sentiment | Transparency     | Correlation Coefficient: -0.018<br>Sig. (2-tailed): .878<br>N: 77 |   |
|                       |                      | Acceptability    | Correlation Coefficient: 0.070<br>Sig. (2-tailed): .543<br>N: 77  |   |
|                       |                      |                  | Willingness   | Correlation Coefficient: 0.090<br>Sig. (2-tailed): .436<br>N: 77  |
|                       | Infrastructure       | Electricity      | Correlation Coefficient: 0.168<br>Sig. (2-tailed): .161<br>N: 77  |   |
|                       |                      |                  | Transport   | Correlation Coefficient: 0.099<br>Sig. (2-tailed): .392<br>N: 77  |
|                       |                      |                  |   | ICT   |
|                       |                      | Accessibility    | Correlation Coefficient: 0.151<br>Sig. (2-tailed): .190<br>N: 77  |   |
|                       |                      |                  | Neighbourhood   | Correlation Coefficient: 0.084<br>Sig. (2-tailed): .466<br>N: 77  |
|                       |                      |                  |   | Protest   |
|                       |                      | Security         | Communal Clash  | Correlation Coefficient: 0.083<br>Sig. (2-tailed): .474<br>N: 77  |
|                       |                      |                  |   | Political/Election violence                                       |
|                       |                      |                  | Terrorism   | Correlation Coefficient: -0.248<br>Sig. (2-tailed): .038<br>N: 77 |

## Discussion and Conclusion

This paper examined the effect of operating environment factors on REIT performance in Nigeria using logistic regression and correlation analysis on the questionnaire survey responses. The descriptive statistics of the survey data reveal that Nigeria REIT performance is affected by operating environment factors of political leadership, investors' perception, infrastructure and security. The study found that REIT performance in Nigeria is low. This finding of low performance is vali-

dated by the quantitatively reflected market report in term of capitalisation (fig 1) and dividend regime within the period 2008 – 2012 (Fig 4). Union Homes Hybrid REIT declared no dividend in the past 5 years, the share price as at April 2014 is N47.6 against its IPO price of N51.5, an indication of loss in capitalisation. The Skye Shelter Fund REIT declared dividend consistently for the period under review and maintained its IPO price of N100 as share price meaning there is no price gain over the period. The NAV of N112.3 in 2012 also indicate 8.7% loss in Asset Value when compared to NAV value of N123 in 2009 (fig 4). However, the relationship between the NAV and dividend is direct exhibiting rise and fall together though in a non-proportional manner. 23% increase in NAV in 2009 gave 50.54% increase in dividend, 1.65 decrease in NAV in 2010 resulted in 8.57% in dividend. 8.26% reduction in NAV in 2011 is accompanied with 36.88% reduction in dividend. In 2012, the NAV increased by 9% with dividend increasing by 23.76% (fig 4).

Political leadership was found to be positively related to REIT performance. This indicates that a good and high performing political leadership will lead to high REIT performance. This position aligned with Baum and Murray, (2010) that political risk affects direct foreign investment into some emerging markets which in turn will affect performance. Among the sub-factor of Political leadership, leadership vision has the highest correlation with REIT performance and it positive. Political leadership also exhibited a strong positive and significant correlation to infrastructure and security (Table 2). Therefore, there is a direct link between the factors and their effect on REIT performance. This finding again corroborated the finding of Baum (2008) of political risk being responsible for shortage of investment fund in emerging economies. The study also found that state of infrastructure is also a factor that relate directly with REIT performance in Nigeria. Electricity and accessibility reveal this in the correlation analysis (table 5). Security especially in the wake of terrorist insurgency in Nigeria was found to have the highest, negative and significant correlation (25%) with N-REIT performance (table 5). Chan et.al, (2003); Hiriappa (2008) and Badrinath et.al (1995) concluded that institutional investors have significant impact on REIT performance. The study did not investigate the institutional participation on REIT but look at the individual investors and found insignificant effect on REIT performance, unlike the findings of Clayton and Mackinnon (2001) on noise theory of investors' sentiment and Ong et al (2011). Baum and Murray, 2010; Khan 2014 and David 2014 also listed infrastructure and security as informal or external factors affecting investment in developing countries. Unexpectedly and despite the global economic ranking of Nigeria in terms of transparency, the study found no significant relationship between transparency and N-REIT performance (table 5). David (2014) stated that Nigeria market present a quantum of return on investment irrespective of its global economic image. The findings of this study agree with the statement.

The study conclude that there is correlation between political leadership, infrastructure and security with possible significant effect on REIT performance. 25% negative correlation of security (or insecurity) in the country can lead to total col-

lapse of the real estate investment market. No one in Nigeria is interested in real estate investment in whatever form in the security threatened area of Kaduna, Kano and most especially Jos and Maiduguri which would have ordinarily be a hot spot of real estate market activity. Nevertheless, Nigeria despite the unfortunate and unexpected state of insecurity in the Northern part, lack of infrastructure and unfavourable global economic transparency ranking, the growth rate of Nigeria economy and the strength of her population is a strong factor for good real estate investment return. The leadership of the country should concentrate more on its effort of a private sector led reformation and transformation of infrastructural provision and resolve the terrorist insurgency for a viable investment market especially in the real estate sector. A more transparent economy will no doubt attract foreign direct investment (FDI).

## Limitation and area for future study.

The main objective of this paper is to gain an insight into the effect of the operating environment factors on REIT performance through a questionnaire survey research method. The identified stakeholders include Estate Valuers, Stockbrokers and Shareholders. 120 questionnaires were distributed on equal ratio, highest number of filled and returned questionnaires were from the Estate Valuers. Our conclusion could have reflected the opinion of Estate Valuers more. We did not also calculate REIT return to validate low performance finding of this study but relied on the present share prices of the two REITs through the Nigerian Stock Market and the history of dividend distribution from the annual report of the REITs. A future study will focus on the REIT performance in the Nigerian Market with more input from the stock market players – shareholders and stockbrokers.

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