Global Determinants of Direct Real Estate Investment Returns in Nigeria[1]

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Abstract

As the world is closing in into a global community, it has become a common practice among investors to spread their investment across the countries of the world in efforts to exploit business opportunities wherever they exist. This has been made easier by the advent of modern technologies that facilitate communication and business transaction processes. To real estate investors, their major concern is the level of returns accruable to their investments; therefore, the study is carried out to identify the global determinants of direct real estate investment returns in Nigeria. Questionnaire was used in collecting data from practicing estate surveyors and valuers resident in Abuja, Lagos and Port-Harcourt. The findings reveal that gross domestic product, unemployment rate, inflation, exchange rate (i.e. decline in domestic currency) and rate of taxation are major factors that determine direct real estate investment returns in Nigeria. Therefore, to attract more foreign direct investments in real estate sector in Nigeria, government and her relevant agencies should evolve viable policies that will effectively manage the above enumerated macroeconomics factors as well as grow the economy to make real estate investment attractive in Nigeria.

Keywords: Real estate, Investment, returns, determinants of real estate returns.

Introduction

An investment constitutes an effort that is undertaken by investor to advance money with the intention of making profit in the future. Investors may put their money into many instruments such as stock, bond, mutual fund, gold, real estate and bank deposit. Real estate investment is considered as a long term investment compared to other types of investment.

Investors may invest in income producing property and non-income producing property. When investing in income producing property, investors expect to get profit from income stream which is reflected in cash flow during the holding periods or duration of ownership.

The nature of real estate market makes it an attractive and lucrative asset for many investors. Real estate investment offers opportunities to investors who can invest directly in physical real estate or may choose to invest indirectly through managed funds. Investing directly in real estate

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involves purchasing the residential or commercial property for use as an income-producing property or for resale at a future time. Indirect ways to invest in the real estate market include investing in real estate investment trusts (REITs), real estate exchange traded funds (ETFs), commingled real estate funds (CREFs) and infrastructure funds. Indirect real estate investing offers pension funds and other institutional investors all of the benefits of direct property ownership while eliminating many of the drawbacks of direct ownership. In addition, indirect investing allows much greater diversification across geographic regions and real estate industry sectors, enhancing further the benefits of the asset class. Due to the higher liquidity available in the market, the lower transaction costs and lower capital requirements, average investors prefer to indirectly invest in real estate. This is noticeable in countries where real estate investment trusts are operational.

Real estate is a challenging asset class due to its unique and heterogenic character, and it is typically traded between individual buyers and sellers making real estate an illiquid and non-transparent market. However, according to Hudson-Wilson, Fabozzi, and Gordon (2003), real estate asset has wide-ranging qualities; it is a good source of diversification, and a generator of attractive risk-adjusted returns through its low risk and high Sharpe Ratio. It offers opportunities of hedging against unexpected inflation and finally, real estate is regarded a strong cash flow generator through the income component of the return. Real estate return is based on the two elements: rental income and capital appreciation, the first refers to the housing rent, and the latter refers to the appreciation of the property value over time. Furthermore, real estate asset class can be divided into different sub-segments regarding type of investment and risk profile; Geltner, Miller, Clayton and Eichholtz (2007) classified real estate types into: residential, retail, office industrial, agricultural and plus a smaller sector of hotels and recreational buildings).

Globally, the profitability of investments in any country is highly dependent on the macroeconomics of the country. Macroeconomics deals with the behaviour of the whole (aggregate) economies or economic systems instead of the behaviour of individuals, individual firms, or markets (which is the domain of Microeconomics). Macroeconomics is concerned primarily with the forecasting of national income, through the analysis of major economic factors that show predictable patterns and trends, and of their influence on one another. These factors include level of employment/unemployment, gross national product (GNP), balance of payments position, and prices (deflation or inflation). Macroeconomics also covers role of fiscal and monetary policies, economic growth, and determination of consumption and investment levels.

Macroeconomics, fiscal policy, regulations and political stability affect investment rates of return. Large fiscal deficits reduce government flexibility and may result in higher borrowing costs for businesses. A gruelling regulatory approval process can hamper business investments in different sectors. Political stability creates investor and business confidence because there is more visibility into possible investment returns. Investors tend to avoid countries that change governments frequently or have civil strife. As the dynamics of the macroeconomics factors affect investment performances, it is obvious that these factors similarly affect returns of direct real estate investment globally. Pettinger (2017) also identified interest rates , economic growth, confidence/expectations, technological developments, availability of finance from banks, others (depreciation, wage costs, inflation, government policy) as major factors that affect investments.

The study is carried out to establish the global determinants of direct real estate investment returns in Nigeria with a view to elaborate how they affect real estate returns; and the following objectives are set to be achieved:

(i) to determine the returns of residential and commercial real estate investment in Nigeria.

(ii) to identify the major economic factors that affect direct real estate investment returns in Nigeria, and

(iii) to examine the impacts of the identified economic factors on direct real estate investment returns in Nigeria.

Research Questions

(i) What are the returns of residential and commercial real estate investment in Nigeria?

(ii) what are the major economic factors that affect direct real estate investment returns in Nigeria?

(iii) What are the impacts of the economic factors that affect real estate investment returns on direct real estate investment investments in Nigeria?

Literature Review

Return is the basic motivating force and the principal reward in any investment process. Returns may be defined in terms of realized return (that is, the return which has been earned) and expected return - that is, the return which the investor anticipates to earn over some future investment period - (Prasanna, 2005; Iyiola, Munirat & Nwufo, 2012). The expected return is a predicted or estimated return and may or may not occur. The realized returns in the past allow an investor to estimate cash inflows in terms of dividends, rents, interest, bonus, capital gains, etc., available to the holder of the investment. The return can be measured as the total gain or loss to the holder over a given period of time and may be defined as a percentage return on the initial amount invested. With reference to investment in equity shares, return consists of the dividends and the capital gain or loss at the time of sale of these shares.

Geltner and Miller (2007) described how the total return of any investment is composed of two parts, an income return component (yt) and an appreciation (growth) return component (g_t) (see equation 1).

$$R_t = CF_t + V_t - V_{t-1} / V_t - 1$$

The income return is the net amount of cash flow (CF) paid out to the investor during the period and is calculated by dividing the cash flow paid out to the investor during period t by the market value of the asset at the beginning of period t (V_{t-1}). The appreciation return is the capital value of

the asset during the period and is calculated by dividing the change in the market value of the asset during period t by the market value at the beginning of period t (Geltner, 2007).

Investors have different preferences regarding which part of total return they consider most important. While some investors desire a constant stream of cash flow from their investment, others care more about the value growth of their investment. These differences in return preferences impact the investment strategy, the portfolio composition and which individual properties the investors choose to invest in. When an investor makes an investment decision he has to quantify and compare the likely return that the investment will earn with the risk involved.

Bruce (2005) expressed return as a ratio relating: How much was gained or lost. How much given was risked. He further explained that rates of return are often used in describing the performance of investment rather than the absolute dollar gains. Bruce defined rate of return as the benefit received from an investment over a period of time expressed as a percentage.

Determinants of Real Estate Investment Returns

Many studies have been carried out with regard to the modelling of rental rates which were influenced by various macroeconomic factors, such as GDP, inflation, interest rates, employment services sector, and the unemployment rate. Chin (2003), in the study of macro-economic factors which affect the price of the rental office in Southeast Asia (Indonesia not included) discovered that variables such as GDP, interest rates, loan interest rates, consumer price index (inflation), the output services, unemployment were associated with changes in rental rate.

Ewing and Payne (2003) wrote that to date there has been a considerable concern with evaluating the performance of real estate returns or determining the significance of fundamental state variables. They found out that shocks to monetary policy, economic growth, and inflation all lead to lower than expected returns, while a shock to the default risk premium is associated with higher future returns.

Frappa and Mesonnier (2010) in their research found robust evidence of a significant positive effect of inflation targeting on real house price growth and on the house price – to – rent ratio. The inflation also has a great influence on successfulness and profit of companies. Thus inflation reduces real interest rates, and yet the inflation impetus means that nominal interest rate will conform as quoted by Ewing and Payne (2003) and Lennert (2008).

The fact that inflation reduces investments, economic growth and future yields was also ascertained by Clark (1993). Huizinga (1993) asserted that inflation leads to lower stabilities of relative prices which cause higher uncertainty of investments. Feldstein and Summers (1979) also confirmed that higher inflation leads to higher income taxes of artificial persons.

De Wit and Van Dijk (2003) found that GDP, unemployment and inflation have a significant relationship to the selling price. GDP is positively related to rental rates, and the unemployment rate is negatively related to rental rates.

In Germany, Voigtlander (2011) found that office workers are the best predictors to determine the average of rental rates in comparison with the overall level of employment and unemployment.

Brounen and Jennen (2009) found that the rental rates in all 15 cities in the United States would respond to the increase in the level of workers of office. This implies that increase in the level of employment is positively associated with office rental rates/returns.

Tsolacos et al. (1998) found that the demand factors (GDP, interest rates and unemployment rate) have significant influence on the establishment of the rental rates for office buildings. Oven and Pakdemir (2006) also found that interest rate is one of the important factors in determining rental rates of office in Istanbul. A study conducted by D'Arch et al. (1999) found the relationship between GDP with rental rates, where the change in GDP is one of the most dominant factors to affect the rental rates. While Ng and Higgins (2006) found some macroeconomic variables such as interest rates and employment on services sector were factors that affect the rental rates in the central region of Singapore. However, previous studies conducted by Dobson and Goddard (1992) found that interest rate has a negative correlation to the real estate industry and offices, whereas the rental rates has a positive relationship to all types of real estates.

Hong Kong has been recognized as an international financial centre and it is characterized by many entries of foreign companies which expand its business. Therefore, the Hong Kong economy is strongly influenced by globalization and macroeconomic factors. The results of an empirical study conducted by Prudence (2007) showed that in general, the rental market for office space of class A and B were significantly influenced by globalization, including foreign direct investment and total exports; while the building of C class is more influenced by the local economy such as GDP. Not only the rental rate, the macroeconomic variables also could affect the selling price of office buildings. Singh and Komal (2009) in their study in India found that the GDP, inflation and interest rates could affect the selling price of real estate in India. When the GDP increases, the price is also increased. So it can be said that the national GDP has direct impact on real estate return in India,

Findings from the researches carried out on the determinants of the rental rate and selling prices of real estate using office spaces by Slade (2000) and Chin, (2003) are categorized into 'issues of macroeconomic and microeconomic. Chin in his work equated macroeconomics factors with demand factors whereas; the microeconomic factors are equal to supply factors. He accordingly elaborated that rental rates can be determined by the interaction between the demand and supply which affect the office space rental market. He further indicated that Macroeconomic factors or demand consist of economic growth (GDP), interest rates, employment, unemployment, inflation, income, population, taxation and others. While the microeconomic factors include, vacancy rates, office space inventory (Stock), absorption rate, occupancy rate, costs of construction and physical characteristics as well as others from the property. Their studies streamlined that supply factors and demand factors have impacts on the rental rate and selling prices for office space market which cumulatively affect the returns.

Dobson and Goddard (1992) in their study developed a theoretical model of price and rent determination in the commercial property market. They subjected the series of theoretical relationships derived between prices and rents and a number of exogenous variables to empirical testing for three types of property: industrial property, shops and offices. Their results indicated that employment is an important influence on price, especially for industrial property. According

to them, price and rent are also found to be sensitive to interest rates and residential property values.

Methodology

Data on the direct real estate investment returns in Nigeria and effects of macroeconomics variables on real estate returns were collected from Estate Surveyors and Valuers based in Abuja, Lagos and Port Harcourt with well-structured questionnaire. Real estate surveyors and valuers were selected as the study population because they are professionally engaged in real estate transaction and key players in Nigerian property market. The choice of Abuja, Lagos and Port Harcourt was based on their strategic position in Nigeria economy; which has made the cities choice areas for real estate investment both to local and foreign investors.

Data Analysis and Findings

Data collected from the respondents indicate that returns in direct real estate investment in Nigeria with particular reference to Abuja, Lagos and Port Harcourt were moderately high compared to other investment instruments such as government bonds and shares. The mean returns for residential and commercial properties in the selected cities are as shown in the table1 below.

Table 1. Average Returns of Residential and Commercial Properties in Abuja, Lagos and Port Harcourt, Nigeria.

Cities	Type of Property	
	Residential	Commercial
Abuja	11 - 13%	7.5 – 9.5%
Lagos	15 - 18%	14 - 17%
Port Harcourt	10.5 - 12%	12.5 - 15%

Source: Field Survey, 2017.

Comparatively, the returns as shown in the table above are adjudged favourable; Lagos commands highest average return on commercial and residential real estate investment as shown in Table 1.

Despite that the returns on residential and commercial real estate are reasonably high in Nigeria as illustrated in table 1, it is however observed that the level of foreign direct real estate investment in Nigeria is still relatively low.

From the field data gathered, macroeconomic factors that were indicated by the respondents that affect direct real estate investment returns include gross domestic product, unemployment rate, inflation, exchange rate (i.e. decline in domestic currency) and rate of taxation.

Gross Domestic Product: the gross domestic product (GDP) equals the total value of goods and services produced in a country during a year. GDP is a macro economic indicator of the strength of business, relative wealth of workers and the overall strength of the economy and is used by businesses and investors to determine efficient capital deployment. Economic growth is considered as a sustainable increase in the amount of goods and services produced in an economy over time. Therefore, GDP is a major economic instrument used in measuring the economic performance and well-being of any country.

Economies do not always grow steadily, sometimes it undergo periods of slowdown or expansion. Under severe economic slowdowns (depressions), aggregate incomes decrease, as does the demand for goods and services. As a result, firms and investors realize less profit, more firms go out of business, and, therefore, job opportunities become scarce. These directly or indirectly affect real estate investment returns due to increase in vacancy rates of accommodation and rent defaults associated with local or international economic slowdown.

On the other hand, economies can sometimes grow unusually fast. These periods of rapid economic growth (expansions), businesses witness increasing growth and the demand for goods, accommodations and services increases, which causes firms and investors to realize more profits, returns and more job opportunities become available. Given their importance, globally, direct real estate investors are keenly interested in analysing economic fluctuations of any country of interest in their bids to determine where and when to invest.

Currently, the annual growth of Nigeria gross domestic product is on the decline, hence, making Nigerian economy less attractive to foreign direct foreign investments; particularly in real estate sector (see table 2 below).

Table 2: Nigeria Gross Domestic Product (GDP) growth.

Year	**GDP Annual Growth (%)**
2008	6.27
2009	6.93
2010	7.87
2011	4.89
2012	4.28
2013	5.39
2014	6.3
2015	2.65
2016	-1.6
2017	0.8

Source: world Bank national account data and OECD national account data files, 2018.

Unemployment Rate: it is a key indicator of the condition of the labour market. The unemployment rate is expressed as the percentage of people willing to be employed at the prevailing wage rate, yet unable to find job opportunities. When the unemployment rate is high, work is not only hard to find, but also less rewarding as people already holding jobs might find it difficult to get wage increases or promotions. A low unemployment rate is an indication of good economic performance and vice versa. Where there is high unemployment rate as it is presently witnessed in Nigeria, rent pricing and affordability would be relatively low and there would be increase in rent payment default due to low income growth. Cases of accommodation overcrowding would be predominant as many families and adults may not be able to rent spacious accommodation. This will also contribute to increase in vacant accommodation, glut in property market thereby resulting to low returns in real estate investment as many would not be able to buy or rent available houses. Available Nigerian statistical data as published by National Bureau of statistic (see appendix), shows that unemployment rate has maintained a double digit steady increase in Nigeria since 2015, to all time high rate of 18.8 in 2017. This eloquently affirms the rising cases of loss of jobs in recent years and joblessness occasioned by poor government policies. These however, contribute to shrinking of the economy thereby affecting investment returns versa vice direct real estate investment returns.

Inflation is observed to be the third most important macroeconomic factor that affects real estate investment returns. It is an increase in the overall level of prices measured by the consumer price index. This index shows how the value of money changes over time. Inflation is one of the primary concerns of economists, investors and policymakers because it imposes a variety of costs on the economy.

High inflation rate was found to lead to high rental growth, decrease in real income and glut in property market as many will be willing to sell which overtime would force down the property price when supply exceeds demands. Under this circumstance, the apparent yearly capital appreciation value of real estate investments would decline thereby forcing down the total rate of returns which is usually a function of the summation of the current return (i.e. the periodic cash flow) and capital return (i.e. the price appreciation or depreciation) divided by the beginning price.

High exchange rate: this depends on the country in whose favour the exchange rate is increased. If there is a decline in the domestic currency in the country where investment on real estate is made, both the local and foreign investors would suffer decline in their real income from the real estate returns particularly when compared with dollar returns of comparable properties at international property market.

Similarly, high rate of taxation was found to contribute to low rate of returns. This is arrived at by increasing building and management cost resulting to low rental growth.

Conclusion and Recommendations

The nature of the real estate market makes it an attractive and lucrative market for many investors. With the advent of modern technology which is gradually transforming the world to a global community, many investors find it convenient to invest across the countries of the world in efforts

to exploit investment opportunities wherever they exit. However, to the real estate investors, like every other investor, the attractiveness of any market depends on the returns it offers.

Globally, certain macroeconomic factors have been identified as major determinants of real estate investment returns. This study was therefore carried out to isolate the global determinants of direct real investment returns in Nigeria. The findings reveal that gross domestic product (GDP), unemployment rate, inflation, exchange rate (decline in domestic currency) and taxation are major global determinants of direct real estate investment returns in Nigeria.

Based on the research findings, it is recommended that government should take more stringent measures to grow the local economy as well as to create enabling environment for direct real estate investment to attract more foreign direct investments in real estate sector. This will no doubt help to address the growing shortfall in the accommodation needs in Nigeria.

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Appendix

Unemployment Rates and Inflation rate and Exchange rate (2010 – 2017).

Year	Unemployment Rate	Inflation Rate
2010	5.1	13.7
2011	6.0	10.8
2012	10.6	12.93
2013	10.0	8.5
2014	7.8	8.05
2015	10.4	9.01
2016	14.2	15.7
2017	18.8	16.5

Source: National Bureau of Statistics, 2017

Table 3: Official Naira-Dollar exchange rate (2008 – 2017)

Year	Exchange Rate
2008	118.5
2009	148.9
2010	150.3
2011	153.9
2012	157.5
2013	158.6
2014	192.4
2015	253.5
2016	305.8
2017	359.99

Source: http://Knoema.com/atlas/Nigeria/topics/Economy/Financial-Sector-Exchange-rates/Exchange-rate

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