

## **Comparative Analysis of Direct and Indirect Property Investment Returns in Abuja, Nigeria**

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### **Abstract**

The main thrust of this paper is to comparatively analyse the performance of property and stock market returns with a view to determining whether indirect investment in property shares can be a substitute for direct property investment in Abuja, Nigeria. The study utilized mean score, variance, standard deviation, coefficient of variation and Pearson Product Moment Correlation to analyse the performance of direct and indirect property investment. It was discovered that investment in property shares is more risky than commercial property due to the risk variation of 0.15605 that exist between them. When property returns were correlated with mean dividend of the construction/real estate sub-sector of the stock market, it was discovered that there is a strong positive relationship between the two variables with correlation coefficient of 0.85. The study recommended among other things that investors in either property or stock investment should ensure proper analysis of their investment assets and look beyond their investment assets i.e. make all the necessary comparisons before taking any investment decision.

**Keywords:** *Direct property investment, indirect property investment, investment return, property market.*

## Introduction

Investment has been defined as the sacrifice of something now for the prospect of later benefits (Greer & Farrell, 1984; Ajayi, 1998). It could also be seen as the act of laying out money now in return for a future financial reward. The reward may be in the form of an income flow or by the receipt of a single capital sum or combination of both. The return may be or may not be a guaranteed one. A rational investor is expected to maximize returns whilst minimizing risk. Concern for higher returns and lower risks are two important investment considerations that broadly guide investment decisions. In view of the vital roles played by returns and risks in investment outcome, investment decision process usually involves a trade-off between risk and return (Chandra, 2008). Therefore, investment decisions aim at striking the efficient frontier which provides the best risk-return ratio from an investment portfolio.

In the investment market, investors are usually faced with the numerous alternative investments where funds could be injected. These include stock and shares, bonds, unit trusts, bank deposit and landed property. The investment behaviour and the management skills required differ from one investment type to another. This diversity creates the problem of choice which according to Hargitay and Yu (1993) is one of the fundamental problems in making investment decisions. Investors often have to choose from myriad of investment opportunities that differ not only in the needed capital outlay, but also in the timing and the amount of expected future income flows and the probability associated with them. Investors are expected to take into consideration the characteristics of the various assets and the

linkages among them (Hoesli & MacGregor, 2000) since investment funds will only flow to the sector that promise the most attractive return in the light of the expected risks and returns trade-off.

A stock market is a place where stocks, bonds, or other securities are bought and sold. Individuals and corporate bodies are the investing entities that operate in stock markets for profits. According to Graham (2009), prices of stocks in the market are determined by the financial success of Business Corporation (Business Fundamentals) and the overall demand for the corporation's stock (Market Technical Analysis). With the arrangement in the above highlighted facility, stock market in every economy is the trading ground on which the capital market operates.

Property market is a set of submarkets where property rights are traded. In this form of market, unlike other forms of markets such as the Stock Exchange Market, it has no central dealing spot but is peculiar to geographical location. It could also be a system of transaction between landowners, land users and estate agents. It could also be a framework or medium where transactions in tangible asset like land, buildings are made. However, it is important to note that the market is not fixed to a particular location thus; transaction in it can take place anywhere. Property markets besides being categorised based on local geographical location, are also segmented into commercial property markets, residential property markets, industrial property markets and agricultural property markets. Commercial property market is said to be the most intensively developed and capitalised (Dugeri, 2011).

The implication of the foregoing is that investors have to rely on a set of criteria to guide investment decisions. It is important that every investment criteria should be established through empirical study of this nature; as use of research investment decision criteria promotes the selection of the best investment option from what is available in a particular market. Success in this regard mostly depends on finding strategically appropriate investment opportunities and being able to accurately forecast their past performance. Such forecasting must also consider the performance of the investment media relative to other assets and the different types of investment assets (Hargitay & Yu, 1993; Hwa, 2002). More so, diversification in investment opportunities in recent decades has eventually created the problem of choice which according to Hargitay and Yu (1993) is one of the fundamental problems of investment decision making. Direct property investment requires a great deal of time commitment particularly in its management while stock investment requires a passive management due to the fact that unlike direct property investment, it does not require maintenance and other management functions. Because of this, investors are left to grapple with establishing the performance of the various investments.

Previous studies that focused on analysis of property and stock market returns abound in literature (see Olaleye, 2000; Hwa, 2002; Oyewole, 2006; Olaleye & Aluko, 2007). Although, these studies are pertinent to the field of real estate but a lot of gap are notable in the literature on the comparative performance of the investment assets in the various sectors of the property market and the stock market of most emerging economies, including Nigeria

(Bello, 2012). These works comparatively analyse property and stock market returns however, a larger proportion of the works used residential prices and returns in their studies with the exception of Bello (2012) who actually compared the historic performance of commercial real estate investment with sectors of stock market investment using Lagos, Ibadan and Abeokuta as case study. This study is similar to Bello (2012) except that it focuses on ascertaining whether investment in property shares (indirect property investment) can be a substitute for direct commercial property investment and also examines the relationship between the two forms of investment returns using Abuja commercial property market.

### **Review of Related Literature**

Commercial properties are real estate developments or use of land that entertain business operations and connote the highest form of return on real estate investment (Bello, 2003; Dugeri, 2011). In other words, they are properties that are not exclusively residential in which commercial activities takes place. The economic returns on these properties come in annually or as agreed by the parties involved. The survey of literature has revealed that generally, real estate characteristic and return distribution are different from bonds and stocks which are financial assets.

With a particular focus on the Nigerian market, Olaleye (2005) examined the characteristics of direct property and listed Property Company in comparison with other securities in the Nigerian Stock Exchange between 2006 through 2009 period. The capital returns for each of the investment sectors were analysed with the use of mean returns, the standard deviation, skewness, kurtosis and

return/standard deviation ratio. Also, correlations and co variances between each pair of investments as well as Sharpe market index model were used to establish the diversification potential of direct and indirect real estate in the Nigerian investment scene. The results show that several investment options in real estate and stock markets in Nigeria offer very attractive returns although with compelling high return/risk ratios. The results also indicate that indirect and direct real estate investments outperformed other investment options on nominal return/risk basis and they seem to offer significant diversification benefits for investors of a mixed-asset portfolio (real estate and stocks) as well as portfolio comprising of only indirect and direct property investments.

In Lagos State, Bello (2003) studied the relative performance of residential property investment and securities in terms of average annual return, risk adjusted return, income growth and capital growth. The results of the study rank investment in ordinary share above that of the residential property in absolute terms and risk adjusted return. The finding of the research also indicates that the risk associated with residential property is lower than that of ordinary shares. But this study was limited to residential properties and did not consider commercial properties.

In similar vein, Bello (2012) studied the validity of the widely held belief of inflation hedging characteristics of residential property investment in Nigeria using Fama and Schwartz methodology of splitting inflation into; actual, expected and unexpected. He employed regression analysis to assess the inflation hedging characteristics of residential property, ordinary shares and saving account for the

period of 2000 – 2009. The study observed that actual inflation hedging characteristics was high for ordinary shares and low in saving account, whereas the residential property does not have hedge against actual but expected inflation. The study does not take cognizance of the fact that share bonuses form part of overall return on stock; moreover the period of study has been out-dated because of the effect of recent global economic meltdown.

Oyewole (2006) studied direct property and indirect property investments in Lagos and extended the work of Amidu and Aluko (2006) in the sense that it examined the comparative performance of direct real estate with indirect real estate investment. It considered direct property investment returns of eight non-listed property companies, and UACN property development company (the only listed property company in Nigeria) within the period of 2009 to 2014. The study on the performance level of the media showed that commercial property performed better at direct property intra-media level. The results also showed that indirect property performed better in terms of rate of return and capital appreciation, while direct property performed better in terms of risk adjusted return. However, this study only used UACN for his comparison hence limiting the extent of the application of his findings.

Amidu, Aluko, Nuhu and Saibu (2008) studied real estate security and other investment assets with the aim of analysing the historic performance of real estate and other securities in the Nigerian capital market. The method employed was the annual opening and closing market prices of shares and dividend of the sampled listed company in addition to data on

all share index (ASI), consumer price index (CPI) and yield on 90 days T-Bill were obtained for the period 2009 to 2014. Descriptive, risk adjusted measures and regression models were the statistical tools used. The findings revealed that while real estate outperformed the market on a nominal basis, it underperformed the market stock on a risk adjusted basis over the time period of analysis. Unexpectedly, real estate security did not provide a good protection against inflation and is also uncorrelated with the stock market. The result suggests that real estate security does not after all provide a good substitute to direct real estate investment. The study did not take into cognizance of direct property investment but only considered securities.

Bello (2012) assessed the risk and returns of commercial properties in South-Western Nigeria and selected stock market investment between 2000 and 2009, compared the inflation hedging characteristics and diversification potentials of investing in commercial properties and selected stock market investments. He collected data on the characteristics, rental and capital values of commercial properties from their property managers through the use of questionnaires and he also made use of data on stock prices and dividends on banking, insurance and conglomerate sectors which were sourced from the Nigerian stock exchange. The result showed that average return on all the selected stock investment was higher than that of the commercial property.

As regards risk, commercial property indicated lower risk, compared to stocks. Also, the stock investment had better inflation hedging capacity than commercial properties; combination of both had diversification

potentials. The study concluded that stock market offered attractive higher return than commercial property although with higher risk and there could be diversification benefits in combining commercial property and stock investment.

The preceding reviews have shown that returns from direct and indirect property investment in Abuja property market, Nigeria, have not been considered in existing literature. Hence, the need for this study which provides information on the relationship between direct and indirect property investment returns.

### **Research Methods**

The locations selected for this study are Central Area, Wuse and Garki districts of Abuja where there are high concentration of reputable commercial properties. The study populations are the estate surveyors and valuers; managing agents/owners of purpose built commercial properties in the case and also commercial properties within the selected areas of Abuja. The Directory of the Nigerian Institution of Estate Surveyors and Valuers (2014) indicates that a total number of 107 Estate Surveying and Valuation firms have their offices in Abuja Metropolis: the study area of this research. This figure represents approximately 9.7% of the 1,102 Estate Surveying and Valuation firms practicing in the country.

The sampling technique adopted for this research work is simple random technique and stratified random sampling techniques. Out of the 76 valid questionnaires that were administered, Wuse district being the high rank urban centre had 40 respondents, followed by Garki district where 24 questionnaires were administered, then Central Area with 12

respondents. Central Area had the lowest number of commercial properties existing since 2001, Wuse had the highest in all, the major type of commercial property was shopping complex and majority of the commercial properties were managed by estate agents/managers. For the purpose of this study, data such as capital value, rents, number of business apartments, applicable outgoings to properties, all share index (ASI) and dividends on stock investment between 2001 through to 2012 were obtained. All these are streamlined to achieve the aim of this study.

The scope of the work covers only investment in property shares and direct investment in

property in Abuja between years 2006 - 2015. The basis for selecting this period is to be able to compare the commercial property market and the stock market performance during the pre and post global financial crises era with significant consideration to the various agendas of the respective democratic administrations within the stated period in Abuja, Nigeria. The areas to be studied are Central Area, Garki and Wuse Districts. The reasons for selecting these areas are not far from the fact that apart from being the commercial hub of the city, they host reputable commercial properties including the different types like office complexes and shopping malls.

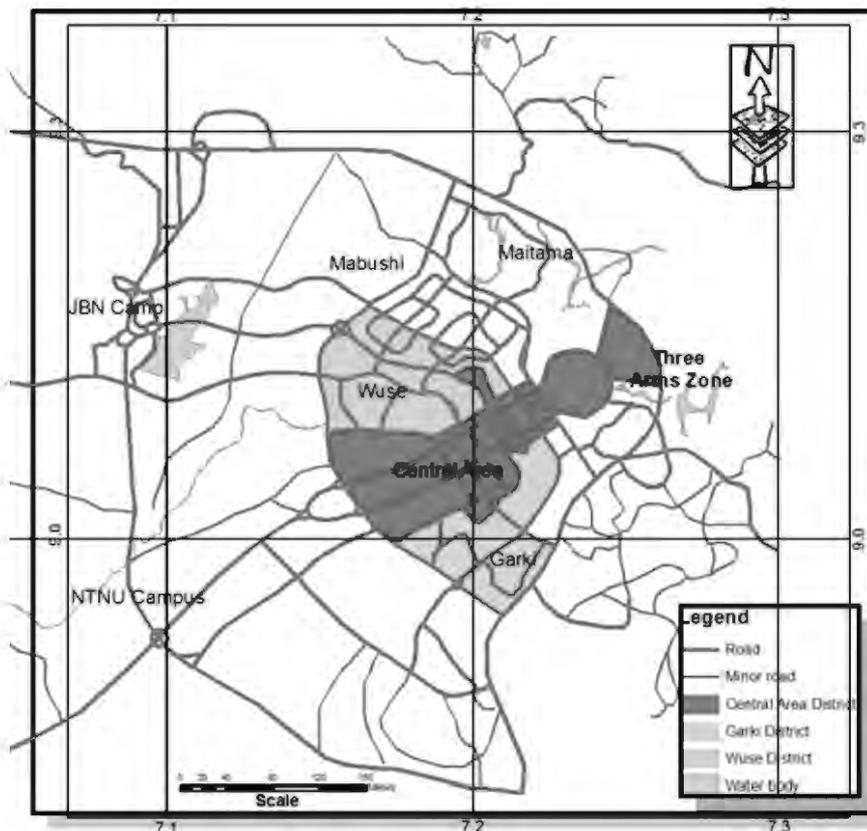


Fig 1.1: Outline Map of Abuja showing the study area  
Source: Federal Capital Development Authority (2016)

**Result**

**Table1. Determination of the suitability of Property Shares (UACNPDC) as against Direct Property Investment (Commercial Property)**

<b>Year</b>	<b>UACNPDC dividend (X)</b>	<b>Mean Property Return (Y)</b>	<b>X<sup>2</sup></b>	<b>Y<sup>2</sup></b>	<b>XY</b>
2004	0.30	8956389	0.09	80216903920000	2686916.7
2005	0.35	8928944	0.1225	79726040960000	3125130.4
2006	0.35	9161632	0.1225	83935500900000	3206571.2
2007	0.45	10666226	0.2025	113768377100000	4799801.7
2008	0.20	10866556	0.04	118082039300000	2173311.2
2009	0.25	11703364	0.0625	136968728900000	2925841
2010	0.35	13212744	0.1225	17457660400000	4624460.4
2011	0.49	14401083	0.2401	207391191600000	7056530.67
2012	0.75	15242414	0.5625	232331184500000	11431810.5
2013	0.50	16588596	0.25	275181517300000	8294298
2014	0.55	17681369	0.3025	312630809700000	9724752.95
2015	0.55	17961979	0.3025	322632689600000	9879088.45
<b>. Σ</b>	<b>5.09</b>	<b>155371293</b>	<b>2.4201</b>	<b>2065246374252000</b>	<b>69928513.17</b>

To check for the significance of the  $r$ -value, the value can be substituted in the expression below:

**Decision Rule:** there is a strong positive correlation between UACNPDC shares and return from direct property investment. Therefore, null hypothesis  $H_0$  is rejected.

However, the strength of the correlation between the two variables is indicated by the coefficient of determination ( $r^2$ ) i.e.  $(0.70)^2 = 0.49$ . To get the percentage variability,  $0.49 \times 100 = 49.00\%$ . This means that 49% of the total variability in UACNPDC share dividend is explained by the returns from direct property investment.

**Table2. Relationship between Property and Stock Market Returns in Abuja**

Year	Mean Return of Property (X)	Mean Dividend of Stocks (Y)	X <sup>2</sup>	Y <sup>2</sup>	XY
2004	8956389	0.2940	80216903920000	0.08643600	2633178.366
2005	8928944	0.3625	79726040960000	0.13140625	3236742.200
2006	9161632	0.2500	83935500900000	0.06250000	2290408.00
2007	10666226	0.2500	113768377100000	0.06250000	2666556.500
2008	10866556	0.2625	118082039300000	0.06890625	2852470.950
2009	11703364	0.3625	136968728900000	0.13140625	4242469.450
2010	13212744	0.5500	174576604000000	0.30250000	7267009.200
2011	14401083	1.5475	207391191600000	2.39475625	22285575.94
2012	15242414	0.8000	232331184500000	0.64000000	12193931.20
2013	16588596	0.9000	275181517300000	0.81000000	14929736.40
2014	17681369	0.8125	312630809700000	0.66015625	14366112.31
2015	17961979	0.9125	322632689600000	0.83265625	16390305.84
$\Sigma$	<b>155371293</b>	<b>7.304</b>	<b>2065246374252000</b>	<b>6.18322850</b>	<b>105354496.356</b>

Applying this formulae

$$\frac{105354496.356 - 94569327.01}{7318457.257 \times 1.737527167}$$

$$\frac{10785169.29}{12716018.30}$$

$$= 0.85$$

To check for the significance of the  $t$ -value, the value can be substituted in the expression below:

**Decision Rule:** there is a strong positive correlation between property and stock market return. Therefore,  $H_0$  is rejected.

However, the strength of the correlation between the two variables is indicated by the coefficient of determination ( $r^2$ ) i.e.  $(0.85)^2 = 0.7225$ . To get the percentage variability,  $0.7225 \times 100 = 72.25\%$ . This means that 72.25% of the total variability in property market return is explained by the stock market return.

## Discussion

The mean of property return was used to correlate with the mean dividend of UACNPDC shares using Pearson Product Moment Correlation Coefficient, it was discovered that a strong positive correlation exist between the two variables because the correlation coefficient was 0.70 and the null hypothesis was rejected. In addition, 49% of the variability in UACNPDC shares is explained by direct property investment returns. When property returns were correlated with mean dividend of the construction/real estate sub-sector of the stock market, it was discovered that there is a strong positive relationship between the two variables because the correlation coefficient was 0.85 and the null hypothesis was rejected. Also, 72.25% of the variability in property returns is explained by dividends from stock investment.

Rent is mostly reviewed every 2 years. Each annual yield has the same average yield if there is no capital appreciation or depreciation but annual yield varies with average yield if capital appreciates or depreciates annually. Difference between average yield and last year of consideration yield indicates an element of depreciation or appreciation of the capital invested.

Majority of the commercial properties in the study area are multi-tenanted and have been acquired and managed for more than nine years. Most of the property managers have more than one commercial property under their portfolio though in the range of 1-5 numbers. The bulk of the commercial properties in the study are in good state of repair thereby making their repair

expenses to be below 10% of the gross rent in the average.

The respondents are of the view that return from the commercial property is better than the one from stock investment. In terms of characteristics, the view of the commercial property managers is that commercial property is preferred as collateral security to stocks but less prone to risk like stocks. It is more capital intensive than stocks, but less liquid like stocks. Commercial investment is less regulated than stocks though more prone to taxations. The data for analysing commercial property performance is not readily available in Nigeria like stocks; it is believed by the property managers that commercial property outperforms the stocks.

The mean of property return was used to correlated with the mean dividend of UACNPDC shares using Pearson Product moment correlation coefficient, it was discovered that a strong positive correlation exist between the two variables because the correlation coefficient was 0.70 and the null hypothesis was rejected. Also, 49% of the variability in UACNPDC shares is explained by direct property investment returns. When property returns were correlated with mean dividend of the construction/real estate sub-sector of the stock market, it was discovered that there is a strong positive relationship between the two variables because the correlation coefficient was 0.85 and the null hypothesis was rejected. Also, 72.25% of the variability in property returns is explained by dividends from stock investment.

## Conclusion

From the previous analysis in this study, what was thought by people as regards return from commercial property and stock investment were substantiated because the return from commercial property investment are better than that from stock investment. In conclusion, property market returns are strongly correlated with stock market returns, regular appraisal of investment should be undertaken on frequent basis by the investors to enable them know how well their investment asset is fairing. This work can therefore serve as a data guide for intra and inter-sectorial investment appraisal for its adopted case study.

## Recommendation

Based on the findings from this work, it is hereby recommended that investors in either property or stock investment should ensure proper analysis of their investment assets and look beyond their investment assets i.e. make all the necessary comparisons before taking any investment decision.

The investor should not only look at the return aspect of investment as performance indicator, risk (measured by the level of uncertainty) should also be considered alongside with return when making investment decision. In addition, investors should explore the potential of diversification benefit inherent in investment and hereby ensure a proper investment mix.

Due to the fact that data required for the performance analysis of property are generally very scarce, the estate surveying professionals and academia should intensify efforts towards creating or having property performance data

bank and creating property index as it is obtainable in the developed countries. There should therefore be collaborative efforts among the estate surveying professional bodies (NIESV & ESVARBON), estate surveying practitioners and training institutions to ensure national and regional data bank as reference for estate surveyors in property investment appraisals.

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