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An Evaluation of the Risks of Shops and Warehouses in Abak Local Government Area, Akwa Ibom State of Nigeria.

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Abstract

The aim of this research was to investigate the returns of investment in shops and warehouses in Abak with view of developing models to forecast rental and capital of shops and warehouses investment in the study area. In order to achieve the stated aim, the following objectives were to investigate the average rental and average capital values of shops in the study area from 2012 to 2021; to ascertain the average rental and average capital value of warehouses in the study area from 2012 to 2021 and to analyse the returns of investments in shops and warehouses in the study area. This research work adopted the cross-sectional survey type of design. Primary data used for this study was obtained through questionnaire survey. The data collected was used to calculate the returns. Descriptive statistics was used to analyse the data while the Holding Period Returns technique was employed to determine the returns of the shops and warehouses. The study revealed that investments in shops and warehouses in the study area provided a continuous increase in rental and capital values while the corresponding returns ranged between 11.01% and 15.01% in warehouse investments as well as 5013% and 31.50% in shops investment. Based on the research findings, although shops seemed to have had the highest returns, it was recommended and concluded that further research be carried out to ascertain the risk of both investments so as to draw proper conclusion on which of

the two investments performed better. The investment information provided in this study has significant implications for both local and foreign investors desiring to invest in the Nigerian property market, with particular reference to commercial property market in Abak.

Keywords: Returns, risk, shops, warehouses, Abak.

Introduction

The study of returns of investment on shops and warehouses, is very vital at this time when emphasis is on investment performance analysis in almost all the countries of the world. According to Ekpo (2021), analysis of the risk on investment is a key factor in the physical and economic growth of cities in Nigeria. In the investment corridor, shrewd investors like to carry analysis about how high or low risks are, before embarking on any investment.

The demand for shops and warehouses has recently risen astronomically in most urban cities of the country especially in Abak Local Government Area of Akwa Ibom State of Nigeria (Ekpo and Jeremiah, 2022). The demand according to Oyewole (2013) is as a result of the global economic recession, which compelled the unemployed and other public servant to explore trading activities in addition to their daily endeavours. The reaction of some investors to the demand has been to increase the number of commercial outlets. On this note, in many towns and cities of the country, including Abak, open spaces within the vicinity of public institutions have been irrationally developed to accommodate shops and warehouses. The present condition is made worse with the perceived notion among private property investors that one particular property investment is riskier than the other. However, it is considered not wise for investors to base their decisions on intuitions, but on scientific conclusions in which the researchers in this study have done.

Investment in shops and warehouses in urban areas like Abak are done mostly by private investors. According to Udobi et al (2017), real investors usually base their investment decisions on intuition and therefore sink considerable sum of money into real estate investment annually without having any knowledge and understanding of the risks of the investment. It is in view of

this that the researchers conceived this study.

The aim of this research was to analyse the risks of investment in shops and warehouses in Abak with a view to advising prospective investors of shops and warehouses investment in the study area, on the type of commercial property investment to embark upon. In order to achieve the stated aim, the following objectives were considered;

i) to analyse the returns of investments in shops and warehouses in the study area.
ii) to examine the risks of investing in shops and warehouses in the study area.

The investment information provided in this study has significant implications for both local and foreign investors desiring to invest in the Nigerian property market, with particular reference to commercial property market in Abak.

Review of Related Literature

The acquisition of knowledge on the risk of investment is always taken into consideration by property investors before embarking on any real estate investment (Ekpo and Udoh, 2021). As noted by Tan (2008) in his research, the risk of investment on the property contributed reasonably to the investors' decision to buy a property. In research carried out by Natasha and Hassan (2015), the researchers found out that risk has a significant (p=0.000) and positive impact on commercial property purchasing intentions of the respondents. Based on the empirical model, change in every unit of risk will increase the intention by 0.246 unit, if other things remain equal.

Risk in Property Investment

Risk is a common feature of all forms of investment. According to Ekpo (2021), the whole concept of risk is fundamental to investment choice. Any investor who embarks on any project or buys an asset expects some benefits as future returns. Every investment has two principal components: expected return and risk. In an ideal situation, an investor is expected to maximize returns while minimizing risk. However, the cost and paybacks of the project are rarely known with complete certainty. The market prices and returns are subjected to the effects of the economic pressure, population, taste and fashion, environmental as well as changing weather conditions. Therefore, a wise investor assumes risk with the hope of making profit or any forms of return.

Risk assumption depends on the past investment trends, future projection, trends in the economy among others. Often, the actual returns from the investment may vary from the projected returns. In some cases, the invested capital is lost. According to Ubom (2010), the degree of variability of the actual return from the estimated return of the investment as well as the probability of the loss of capital reflects the risk elements of investment. The higher the degree of such variability, the higher the risk involved and vice versa; and the greater the risk involved in a projected, the greater the expected rate of return or cost of capital. The problems associated with investment risk cannot be totally eliminated even in an ideal economic condition.

Concept of Risk

The term risk has been defined as the probability of loss of income, assets or condition of mishap, unfortunate situation or circumstances that result in the decline of revenue or loss of income, property, wealth and other items having economic and financial values. It is the possibility that an investor will lose some or all in product demand, high-competitive pressure, unfavourable government policies, poor economic conditions, community uprising, and industrial disharmony and management inefficiencies. Environmental factors such as weather and climate changes are also noted to have adverse effect on investment (Udoudoh, 2016).

From a property investment perspective, risk is seen as the level of probability that a required return will be achieved when measured in terms of capital value and income. As an investment, some properties have a high-risk profile while others have a low-risk profile. This depends on the type, nature, location and possibly, the lease term of the property. Over time, the variance of actual return from expected return can be measured and used to help determine probability level. Risk then is about the interaction of future returns, which can have a number of possible results, and the chances that any particular outcome will occur. It is all about variances and probabilities. The degree to which actual performance may exceed the expected performance is called the upside potential, while the amount by which it falls below expectation is known as the downside risk (Diala *et al*, 2021). Investors are concerned with the upward potentials particularly when investment is funded by borrowed capital. The influence of risk on investment and the risk-averse attitude of investors have forced many investors to adopt wrong diversification strategies which are

counter-productive. Even though many property investors consider risk, they do so intuitively or by simply demanding a higher return from their investment, amidst difficulty of predicting the future performance of the investment. Investors require effective and efficient management strategies to risk that will lead to comparative advantages, which can only be achieved through researches of this nature.

Measurement of risk

Udoudoh (2106) posited that risk is the probability of variation between actual and expected returns. But Kalu (2001) distinguished risk from uncertainty since three situations arise in decision making namely: certainty, uncertainty and risk. The measurement of risk is by way of statistical standard deviation. Hence, Baum and Crosby (2007), Kalu (2001) as well as Hoesli and Macgregor (2000), all agree that the traditional approach is to take the standard deviation of the historical variability a measure of risk and that variance or standard deviation is most frequently used measure of dispersion and interpreted as risk. Therefore, to evaluate risk, the standard deviation of ungrouped data is used. Freund and Williams (1975), appraisal institute (2000), Monjol (1997) and Bello (2003) stated the formula as given in Equation 2.

Methodology

The survey was executed with the use structured questionnaire and interviews to source for data on the shops and warehouses investment in Abak. However, due to the problem of heterogeneity of commercial investments, the study area was divided into three zones: zone A (defined by 2km radius from the Central Business District), zone B (defined by 4km radius from the Central Business District) and zone C (defined by 6km radius from the Central Business District). The average rental value (per square meter) and capital value were determined by the researchers from the data collected. The properties were sampled at a uniform interval of every fifth property in each zone. The researchers employed the services of trained research assistants to administer questionnaires on the tenants. The distribution of questionnaires to the tenants were done because the bulk of properties in the study area were managed by the property owners who are not Estate Surveyors there by making it difficult to obtain processed data. In addition, the researchers and their assistants were afforded the opportunity of obtaining firsthand information on properties from the occupiers who could

easily be identified. The respondents were requested to indicate the location of the property, type of property, cost of acquisition and rent paid on each property within the period of study. Total number of completed questionnaires was 433 out of 550, which represents above 79% rate of response. This was considered adequate and provides a basis of discussion in the paper. Data collected were analysed using descriptive statistics. The returns were determined using the Holding Period Return formular given by Equation 1.

The Holding Period Return is expressed as

$$r = \frac{P_1 - P_0 + a_1}{P_0} \quad \ldots$$

Equation 1

Where,

r = Holding Period Return

P_0 = Capital value of commercial property at the beginning

P_1 = Capital value of commercial property at the end

a_1 = Net Income of direct property received during the holding period

From the foregoing, the holding period returns of each asset class were obtained.

However, the risk was also derived by using the formula represented by equation 2.

$$Risk = \sqrt{\frac{\Sigma(xi - \bar{\alpha})^2}{N}}$$

…Equation 2

Where:

x_i = the asset periodic returns,

$\bar{\alpha}$ = the mean return and

N = the number of observations

Study Area

Abak Local Government lies between latitude $5^0\ 0^{'}\ 36^{''}$ N and longitude $7^0\ 46^{'}\ 30^{''}$. Abak lies on the south west of Akwa Ibom State and bounded in the north by Ikono Local Government Area, northwest by Essien Udim Local Government Area. West by Etim Ekpo and Ukanafun Local Government Areas. South by Oruk Anam and in the East by Uyo Local Government Area. Abak town, the local Government headquarters is located 18 kilometers from Uyo,

the state capital. It has a landmass of 304 square kilometers. Abak is known for its importance in agricultural development. It has so many agro-based and agro-allied industries located within it. Abak was the economic hub of the former southeastern Nigeria before the civil war. The Nigerian army barrack that is popularly known as Ibagwa barrack is located or can be found in Abak.

The major economic activity of the people is palm produce. This attracts investors to carry out developments of commercial properties in the area. Before the Nigerian civil war, Abak division was the major producer of palm oil and kernel exported through river ports at Ntak Ibesit and Ikot Okoro. Abak is blessed with natural resources which include rich mineral deposits such as sand, gravel, clay, salt and crude oil. It is situated in the tropical rain forest that supply abundant palm produce, cassava and various vegetables.

Data Analysis and Presentation

(i) Analysis of the Respondents' profile

Data on the rental and capital values of the office and warehouse properties in Zone A, Zone B and Zone C for the period between 2012 and 2021 were obtained from the respondents whose profile are presented in Table 1 to validate the reliability of the data obtained for the study.

Table 1: Respondents' profile

Profile	Item	Frequency	Percentage
Occupation	Professionals	85	19.63
	Retail Businesses	208	48.03
	Banking	10	0.02
	Others	130	30.02
	Total	**433**	**100**
Type of commercial property under lease	Shops	148	34.18
	Warehouses	140	32.33
	Others	145	33.49
	Total	**433**	**100**
Years of occupancy	Above 20 years	80	18.48
	15 – 19 years	85	19.63
	10 – 14 years	87	20.09
	5 – 9 years	89	20.55
	1 – 4 years	92	21.25
	Total	**433**	**100**

Source: Researchers' field survey, 2022.

Table 1 presented the profile of the respondents who responded by supplying the data on capital and rental values in terms of their personal occupation, types of commercial property rented as well the total number of years they have occupied the property. This was carried out to examine the reliability and validity of the data gathered for this study. With respect to the occupation of the respondents, the respondents who were professionals in their respective fields constituted 19.63%, those into retail/businesses constituted about 48.03%, while those in other fields were about 30% of the sampled population. This implies that all the respondents are professionally qualified to respond adequately to the questionnaire. In the area of types of commercial property occupied, those that operate shops constituted about 34.18% of the population, while those that operated the warehouses formed 32.33% as well as other commercial property users comprised 33.49%. this implied that about 66% of the study population used both the shops and warehouses. Table 1 also shows that 20.09% of the respondents have been in the property between 10-14 years, while about 38.11% and 41.80% of the respondents have been in the property above 15 years and below 10 years respectively. This suggests that they have enough practical experience and exposure to supply the necessary data needed for the study. On this note, it can be concluded that respondents, apart from having vast experience, were also found professionally fit to supply valid, credible and reliable data for this study.

(ii) Analysis of the returns of investment in warehouses and shops in the study area

In this section, an attempt was made to analyse the average rental and average capital values of shops in the study area from 2012 to 2021 as shown in Table 2.

Table 2: Average Capital value, Average Rental value and returns of Warehouses in Abak

Year	Capital Value (₦)	Rental Value (₦)	Rate of Returns
2012	11,760,091.18	1,000,000	12.01
2013	12,288,903.03	1,000,000	13.00
2014	12,749,133.83	1,200,000	13.51
2015	13,349,311.53	1,200,000	14.12
2016	13,966,880.21	1,250,000	13.99

2017	14,810,515.55	1,250,000	14.99
2018	15,733,573.93	1,300,000	15.01
2019	16,540,311.35	1,300,000	13.71
2020	17,013,043.06	1,350,000	11.01
2021	17,859,936.73	1,400,000	13.21

Source: Researchers' field survey, 2022.

It can be deduced from Table 2 that, apart from a continuous increase in both the capital and rental values of the property from year to year, there is also a consistent increase in returns from year to year, except a decline which occurred in 2016, 2019 and 2020. The highest return, which is 14.99% from the warehouse properties was obtained in 2017; while the lowest return (11.01%) was obtained in the year 2020. It was also observed that there was a gradual decrease in the rate of return from 2018 to 2020. This may not be unconnected with the recent economic atmosphere currently prevailing in the world as a result of the COVID-19 pandemic. The rate of returns of shops in the study area was also determined from the average rental and capital values using Equation 1 and presented in Table 3.

Table 3: Average Capital value, Average Rental value and returns of Shops in Abak

Year	**Capital Value (₦)**	**Rental** Value **(₦)**	**Rate of Returns**
2012	5,983,341.87	100,000	6.46
2013	6,192,082.31	100,000	5.16
2014	7,992,588.24	150,000	31.50
2015	8,266,994.68	150,000	5.31
2016	8,659,977.01	170,000	6.81
2017	10,764,952.98	170,000	26.27
2018	11,117,195.07	200,000	5.13
2019	11,734,462.35	230,000	7.62
2020	12,138,051.02	230,000	5.39
2021	12,803,462.42	250,000	7.54

Source: Researchers' field survey, 2022.

It can be deduced from Table 3 also that there is a continuous increase in both the capital and rental values of the property from year to year. The highest

return, which is 31.50% from the shop properties was obtained in 2014; while the lowest return (5.13%) was obtained in the year 2018. A gradual decrease in the rate of return from 2018 to 2020 was also observed.

In order to achieve the second objective of the study, the risk of the investment in shop properties were calculated as follows using Equation 2:

Table 4: Calculation of Risk of shop properties in Abak

Year	Rt	$Rt - Rt_{mean}$	$(Rt - Rt_{mean})^2$
2012	0.0646	-0.0426	0.00181476
2013	0.0516	-0.0556	0.00309136
2014	0.3150	0.2078	0.04318084
2015	0.0531	-0.0541	0.00292681
2016	0.0681	-0.0391	0.00152881
2017	0.2627	0.1555	0.02418025
2018	0.0513	-0.0559	0.00312481
2019	0.0762	-0.0310	0.00096100
2020	0.0539	-0.0533	0.00284089
2021	0.0754	-0.0318	0.00101124

Source: Researchers' analysis, 2022

From Table 4, the risk of the shop properties in the study area can be calculated thus:

$\Sigma Rt = 1.0719$

$N = 10$

Therefore, $Rt_{mean} = \frac{1.0719}{10}$

$= 0.1072$

$\Sigma(Rt - Rt_{mean})^2 = 0.08466077$

Variance $= \frac{0.08466077}{10}$

$= 0.008466077$

Therefore, Standard Deviation = 0.09

Thus, the risk of investment in shops in the study area is as high as 9%

Similarly, the risk of investment in warehouse properties is analyzed in Table 5.

Table 5: Calculation of Risk of warehouses properties in Abak

Year	Rt	$Rt - Rt_{mean}$	$(Rt - Rt_{mean})^2$
2012	0.1201	-0.0145	0.00021025
2013	0.1300	-0.0046	0.00002116
2014	0.1351	-0.0005	0.00000025
2015	0.1412	-0.0066	0.00004356
2016	0.1399	-0.0053	0.00002809
2017	0.1499	0.0153	0.00023409
2018	0.1501	0.0155	0.00024025
2019	0.1371	0.0025	0.00000625
2020	0.1102	-0.0244	0.00059536
2021	0.1321	-0.0025	0.00000625

Source: Researchers' analysis, 2022

From Table 5, the risk of the warehouse properties in the study area can be calculated thus:

$\Sigma Rt = 1.3457$

$N = 10$

Therefore, $Rt_{mean} = \frac{1.3457}{10}$

$= 0.1346$

$\Sigma(Rt - Rt_{mean})^2 = 0.00138551$

Variance $= \frac{0.00138551}{10}$

$= 0.000138551$

Therefore, Standard Deviation = 0.012

Thus, the risk of investment in warehouses in the study area may be said to be very low at 1%

Discussion of Findings

The study revealed that for both shop and warehouse property types, there was a constant and steady increase in rental values and capital values from 2012 to 2021. The study revealed that the returns of the warehouses in Abak continued in a steady and progressive pattern, while that of the shops fluctuated from year to year. Using the forecast equation derived from the linear graph, both the rental and capital values for the next few years can be calculated. Generally, the

predictive models are useful to forecast the likely capital and rental values of shops and warehouses in the study area. If an intending commercial property investor would desire to know the probable capital and rental values of shops and warehouses within the study area, say in the next few years, then the investor can simply apply the number of years to replace 'x' in the equation in order for the capital or rental value of that particular year can be derived as the case may be.

Conclusion

The study examined the average rental and capital values of shops and warehouses in Abak Local government Area of Akwa Ibom State. It however, did not ascertain and risk involved in the investment of shops and warehouses in the study area. It employed the Survey method to collect data for analysis. The study found out that the average return of shops was 10.72% while the warehouses had an average return of 13.46%. On the other hand, it was found out that the risk of investment in warehouses in Abak was as low as 1% while that of the shops rose to 9%. It can then be concluded that a prospective investor must choose to invest in warehouses, which does not only produce a high return, but has very low risk. The information provided in this study can provide a basis for investors to make informed decision with respect to commercial real estate investments in emerging property markets in general and in Abak in particular.

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