

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms



Israel S. AKINADEWO (FCA, Ph.D)¹, Olajide J. ADEBOWALE², Bukola I. FAGBOMEDO³, Adenike M. LAWAL⁴, Kehinde S. OYEWOLE⁵

^{1,2,3,4,5}Department of Accounting, Afe Babalola University, Ado-Ekiti1, Ado-Ekiti

ORCID: 0000-0002-2094-6843¹, 0009-0006-5137-5795², 0000-0002-6788-1960³, 0009-0001-6955-8796⁴, 0009-0006-7000-7744⁵

ABSTRACT: In order to investigate the factors influencing the choices of investment properties of the firms listed on Nigeria Exchange Group (NGX), this study carried out an empirical investigation. 155 businesses that were listed on the Nigerian Exchange Group (NGX) as of December 31, 2022, made up the study's population. A purposive sampling strategy was used to select a sample size of fifty-five firms. Data were obtained from the companies' audited annual financial reports for the years 2012-2022. Panel data regression (PDR) was utilized for the analysis of data. The findings showed that the accounting choices made by businesses regarding the management of investment property are significantly influenced by both debt and business size. Furthermore, the choice of how to treat investment property in accounting is not much influenced by the degree of board independence. Moreover, non-financial firms listed on the stock exchange choose different accounting methods for their investment assets due to the negative and significant effects of ownership concentration. This is due to the fact that a company that has a high ownership concentration is less likely to base its accounting choices on the International Financial Reporting Standards (IFRS). This implies that businesses are less likely to adhere to the fair value technique for valuing investment property if their ownership is more concentrated. The study discovered that a firm's accounting decision on the handling of investment property is significantly influenced by the drivers of investment property choosing. It is, thus, recommended the need for firms to set up a system that would track and assess investment property choices on an ongoing basis. This is expected to develop robust, and proactive plans that consider both short-term financial gain and long-term viability.

KEYWORD: IAS 40, investment property, accounting choice, cost model, and fair value model.

GEL Classification: M41, D92, E22

1. INTRODUCTION

International Accounting Standard 40 (IAS 40), is a generally recognized accounting standard that is applied to the evaluation of investment assets across numerous industries. It has received recognition on a global scale and is cited by the IFRS Foundation (2022), Alves (2019), and Olante & Lassini (2022). The fair value and cost models are two of the accounting models available to organizational management for measuring investment property under IAS 40 (Olante & Lassini, 2022; Alves, 2019). One of the two measuring methods must be chosen by an entity, though it may alter if using a different method results in a more appropriate presentation. But switching from the fair value model to the cost model could not be possible because fair value is the investment property's revalued worth rather than its amortised or historical cost. As a result of the globalization of financial standards, however, Akinadewo et al. (2023) believed that stakeholders in the past decade, have intensified more efforts for transparent financial statements which encourages more firms to adhere to standards' provisions.

Gofe (2018) discovered a relationship between a nation's investment property percentage and the classification systems used to separate industrialized and non-industrialized countries. The level of investment in developed nations is very high, while that in emerging nations is relatively low (Gofe, 2018). Alves (2019) asserts that it is imperative to enhance the caliber of financial reporting data and augment the transparency and comparability of financial reports. Choosing suitable accounting option models, such the cost and fair value models, can help achieve this. The two did not examine the methods that are available for assessing investment property in accordance with International Accounting Standard (IAS) 40. This omission could lead to incorrect financial planning and underutilization of investment opportunities.

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

Fair value was defined by Idekwulim (2019) as the proceeds from the sale of an investment property or the amount paid to transfer an obligation in a transaction involving market participants that is carried out in a planned way on the designated measurement date. The net profit or loss for the relevant period must include any gains or losses brought on by changes in the fair value of investment property (Alves, 2019). As of the financial report date, the fair value must to precisely reflect the state of the market and the relevant circumstances. Investment property is documented using the cost model described in IAS 16 Property, Plant and Equipment after the initial acknowledgment. This entails subtracting from the initial cost the cumulative depreciation and impairment losses (Idekwulim, 2019).

According to Alehegn (2020) and Idekwulim (2019), investment property is real estate that is bought with the goal of making money through potential sales, rental income, or both. It was further stated that an individual investor, an investment corporation, or a corporate organization might acquire the property. Alehegn (2020) drew a sharp distinction between public and private investment, highlighting the fact that the former has a greater marginal productivity and is more important to the national development of a developing market. Any property, whether art, shares, land, or other collectibles, that an investor purchases with the hope of making a profit in the future is referred to as an investment property. It is possible to make a short-term or long-term investment in an investment property.

Globally, the evaluation of investment property has gained importance, especially when choosing the best accounting technique given the distinctive features of various countries. Bustami and Heikal (2019) investigated the elements that drive the profitability performance of Indonesian real estate and property, as well as the implications for stock returns. Chinnasamy et al.'s (2019) study looked at the behavioral traits that are particular to Omani people in order to investigate the elements that impact investing techniques. In order to investigate the effects of macroeconomic variables, specific sector determinants, and financial performance on the stock returns of real estate and property enterprises listed on the Indonesia stock market, Endri et al. (2021) performed a study. The variables affecting investment activity in Nekemte town, Ethiopia, were investigated in a study by Gofe (2018). A study on the strategic factors that could affect foreign direct real estate investment in Turkey was carried out in 2019 by ŞİT. The global elements influencing the profitability of direct real estate investments in Nigeria were evaluated by Awa et al. (2019). Smit et al. (2022) investigated the effects of fair value changes on profitability ratios in South African investment properties. The research will offer valuable perspectives to investors regarding the benefits of property investment, mostly due to the expected increase in value. It will also look at the economic development of developing nations to find potential investment opportunities. This will result in the creation of job possibilities, which will raise the standard of living for people in emerging nations. Additionally, it will provide ample opportunity for the management to select the best accounting method based on the fair value and cost models, mostly for reporting assessment. It will enhance the process of formulating policies for public administrations, commercial enterprises, and private groups.

The study's objectives are to identify and assess the variables influencing real estate investments and to strengthen their influence on Nigeria's economic expansion. The lack of domestication of Alves' (2019) study on investment property accounting is the recognized research gap. The purpose of this study is to evaluate the factors that influence Portuguese Listed Firms in Nigeria's choice of accounting policy with regard to investment property. There is a need for more research because this sector of the accounting field in Nigeria has not received enough attention. Data from the real estate and property industry listed on the Nigeria Exchange Group were used in the study. The study's time period was from 2012 to 2022.

The study's remaining component was split into four separate sections: Part two of the literature study included reviews that were conceptual, theoretical, and empirical. Sections four and five offered a comprehensive conclusion and recommendations, whereas part three concentrated on the technique.

Because the study will be using historical data, an ex-post facto research approach will be used. The study population comprises 155 companies that, as of December 31, 2022, had investment properties declared in their financial accounts and were listed on the Nigeria Exchange group (NGX). The research will utilize the purposive sampling technique to consciously select a sample size of 100 companies. This will help the study's goal of performing a comparative analysis to be more successfully attained. The Corporate Governance Report, the NXG information book, and the public annual reports of the selected companies were among the secondary sources from which the data was gathered. The study's time frame was from 2012 to 2022. Because of the probable changes in governmental and regulatory regulations brought about by the expansion of the economy, 2012 was selected as the base year. Panel data regression analysis and descriptive statistics were used to analyze the data.

2. LITERATURE REVIEW

2.1. Conceptual Review

2.1.1. Accounting Choice

An accounting option is a choice that significantly affects how the accounting system turns out, and these decisions can vary from company to company. Alves (2019) defines an accounting option as any decision that is primarily taken with the goal of affecting the accounting system's outcomes in a particular way. This covers asset price, return on investment, taxes, regulations, and the financial statements made in compliance with GAAP.

A financial indicator called return on assets (ROA) is used to evaluate the profitability of a business. This indicator shows that the company is getting good returns on all of the assets that are being used. The terms "return on investment (ROI)" and "return on total assets (ROA)" are occasionally used interchangeably, according to Bustami and Heikal (2019). The ability of investments to provide anticipated returns is assessed using this ratio. Furthermore, return on assets refers to the ability of the business to make a net profit from the capital invested in all of its assets, as per the findings of Smit et al. (2022). A metric called return on assets measures how well a company uses its financial resources. The total of all investments or assets is known as capital.

A larger return on assets suggests that the company can generate more profits, which makes the stock of the company more appealing to investors. Investors are likely to invest in this company due to its strong Return on Asset (ROA). This is due to the company's increased profits, which will positively impact investors' dividend payments. Demand for the shares will rise in response to a growth in potential investors, which will result in a sharp increase in the company's stock price. According to study by Endri et al. (2021), the return on assets influences accounting decisions in a rather substantial way.

2.1.2. Utilize to maximum advantage

A financial indicator called leverage measures how much of a company's total assets are financed by debt. By dividing total liabilities by total assets, it is calculated. Leverage essentially shows the extent to which a company's assets are financed through debt. This study defines leverage as the proportion of long-term debt that makes up a company's capital structure. A high leverage ratio is indicative of a company that uses debt rather than equity. Companies with higher levels of borrowing are more likely to employ fair appraisals for their investment property, according to Chinnasamy et al. (2019) and Alves (2019).

2.1.3. Ownership Concentration

Ownership concentration is the extent to which owners of a firm can influence management decisions in a way that favors shareholders, based on the percentage of their shares (Alves, 2019). It also represents the proportion of debt to equity held by shareholders. concentration of ownership Managers' opportunities to engage in aggressive accounting methods are limited since major shareholders are expected to control managerial actions effectively. Better financial reporting quality follows from this (Alves, 2019). There may be restrictions on the use of discretionary authority by managers of companies with a large ownership concentration when choosing accounting methods. This research operationalized liquidity as the degree to which long-term debt predominates over equity in a company's financial structure in order to evaluate the effect of significant debt on ownership concentration.

The ease with which a security or asset can be purchased or sold on the market without significantly altering its price is referred to as liquidity. It gauges how quickly and simply something can be done.

The ability of a business to convert its assets into cash in order to pay for short-term commitments or obligations is known as liquidity. This can be done through taking out a loan or using cash on hand from the bank. According to Smit (2022), liquidity is the ratio that compares an organization's easily accessible assets to its liabilities in order to assess how well-positioned it is to satisfy its short-term financial obligations. The current ratio, a widely used liquidity statistic, was used in this study to evaluate liquidity.

2.1.5. Non-Executive Directors

Those who sit on a company's board of directors but do not hold an executive role are known as non-executive directors. Non-executive directors are independent advisors who are not responsible for the day-to-day operations of the company. Due to their independence and specialized knowledge, non-executive directors (NEDs) are thought to be extremely effective watchdogs over the actions of executive directors (Bustami et al., 2019). The proportion of non-executive directors to all board members in a company was calculated for this study in order to quantify non-executive directors.

2.1.6. Company Size

The firm size was measured using logarithmic transformations of total assets, which is a covariate. The concept that a larger corporation will incur more administrative costs and have a greater burden of wealth transfers than a smaller one determines the size of a corporation. (Alves, 2019)

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

2.2. Theoretical Framework

Developed by Watts and Zimmerman in 1978, Positive Accounting Theory (PAT) is a well-known accounting theory. According to positive accounting theory, the goal of accounting theory is to predict and provide an explanation for accounting actions. PAT's main goal is to forecast and make accounting procedures clear. This study's goal is to clarify and predict the possibility that businesses will use a particular accounting method (Wiratama & Asri, 2020). PAT focuses on the relationships that exist between those who provide resources to an organization and how accounting helps to make these relationships happen. The foundation of positive accounting theory is the basic tenet of economics, which holds that people act opportunistically to maximize their wealth because they are driven by self-interest. The opportunistic perspective of positive accounting theory, according to Alves (2019), implies that management is likely to choose an accounting solution that supports their objective of maximizing wealth. PAT theorists contend that businesses would instinctively choose the metrics that most accurately reflect their performance. Thus, they adopt an anti-regulatory stance and contend that laws are superfluous. The concept leaves open the methodology that an entity ought to employ.

2.3. Analysis of observed data

Alehegn (2020) carried out a study to determine the variables influencing private investment and to investigate the underlying causes of problems concerning private investment in the municipality. Primary and secondary data were both analyzed in the research. Key instructive interviews and a questionnaire made up the primary data. The Mekane-Eyesus town investment office's annual report was one of the secondary data sources. Descriptive analysis was the method used for the analysis. The revelation revealed that investors and the government are the sources of the forces that impact private investment. The first group of issues includes things like having trouble making ends meet, not having enough experience in the particular area of investing, and not wanting to take out a loan since the requirements for collateral are so high. These latter concerns include an unfair tax structure, insufficient oversight and assessment mechanisms, and, to some extent, local environmental issues.

In order to determine the global determinants influencing the returns on direct real estate investments in Nigeria, Awa et al. (2019) carried out research. Using a questionnaire, information was gathered from qualified estate surveyors and valuers who worked in Abuja, Lagos, and Port-Harcourt. The findings show that the main factors influencing direct real estate investment returns in Nigeria are the GDP, the rate of unemployment, inflation, exchange rates (more especially, the decline in local currency value), and tax rates.

Bustami and Heikal's 2019 study looked at the variables that affect profitability performance and, in turn, stock returns in the real estate and property industries that are listed on the Indonesia Stock Exchange (IDX) between 2007 and 2014. A sample was taken from 23 of the 45 property businesses that are listed on the IDX. Empirical results from the study have a big impact on how the theory of a firm's profitability performance is developed. These results pertain to the factors that influence profitability and the return on the company's shares.

Chinnasamy et al.'s (2019) study looks into the behavioral factors that influence investment choices and strategy in the Sultanate of Oman. The purpose of this research is to identify the particular behavioral characteristics that influence individual investors' decision-making in the Muscat Securities Market (MSM). Data from individual investors who participated in trading activities in the MSM (Muscat Securities Market) during the fourth quarter of 2018 was collected using a descriptive study approach. While the secondary data is acquired from a variety of sources, including journals, stock brokers, and other pertinent sources, the primary data is acquired through the use of a structured questionnaire. The investigators employed a basic random sample methodology to gather information on sixteen behaviorally-related factors. After that, techniques for analysis of variance, factor analysis, and principal component analysis with varimax rotation were used to examine the collected data. The study determined that anchoring, mental accounting, price movement, trade volume, and market information aspects are the five essential components of an investment strategy.

To Endri and associates (2019), the expected return on real estate and property stocks is heavily influenced by macroeconomic risk factors. The goal of the study is to present empirical data regarding the effects on stock returns of interest rates (SB), exchange rates (KURS), return on assets (ROA), debt-to-equity ratio (DER), and current ratio (CR). We'll utilize a panel data regression model to accomplish this. 23 of the 63 companies in the real estate and property sector that were listed on the Indonesia Stock Exchange (IDX) between 2015 and 2019 make up the research sample. The study's empirical results indicate that while the SB variable has a positive effect on stock returns, the variables ROA, CR, IHPK, and KURS have a negative effect. There isn't enough proof to say that the amount of corporate debt (DER) and stock performance are related. The biggest influence on stock returns is the currency rate. The dominance of foreign investors in the Indonesian stock market is indicative of this. As a result, the stock price immediately drops anytime foreign currencies appreciate and are removed from the stock market.

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

Gofe (2018), researched in the town of Nekemte, which is roughly 328 kilometers from Addis Ababa, the capital of Ethiopia, and situated in the Oromia region. The study looked at the factors that affect investment activity in this area. The study looked at the main things that affect the town's investment activity and offered suggestions for how to deal with these things to draw in investment. Primary and secondary data were both analyzed in the research. Because the activities were so different from one another, the researcher used stratified sampling techniques and used Solvin's formula to get the sample size. Descriptive analysis was used in the study. According to the poll, the primary obstacles that entrepreneurs encountered during the startup phase of their business were related to finances and limited financing availability. The survey also discovered that these entrepreneurs received little assistance and motivation from investment offices. The observed data, however, failed to bring to the fore the established variables adopted by this study and in addition to the latest data covering to 2022 to show the gap filled and the eventual contributions to the body of knowledge.

3. DATA AND METHODOLOGY

This study used ex-post facto research approach. As of December 31, 2022, 155 companies that are listed on the Nigeria Exchange Group (NXG) and have investment properties in their financial statements comprise the research population. The research employed the purposive sampling technique to specifically select a sample size of 60 companies. This aided study's goal of performing a comparative analysis to be more successfully attained. The NXG fact book, the Corporate Governance Report, and the public annual reports of the selected companies were among the secondary sources from which the data was gathered. The study's time frame was from 2012 to 2022. Because of the possibility for changes in governmental and regulatory regulations as a result of economic development, 2012 was selected as the base year. Panel data regression analysis and descriptive statistics were used to analyze the collected data.

3.1. Model Specification

The study conducted by Alves (2019) investigates the factors that influence the accounting decisions made by Portuguese listed companies regarding their investment properties. The study examined the correlation between FSIZE, LEV, BONUS, INF_ASY, OWN_CON, NED, and Accounting for Investment Choice. The study's model is presented as follows: $CHOICE_{it} = \beta_0 + \beta_1(LEV_{it}) + \beta_2(SIZE_{it}) + \beta_3(BONUS_{it}) + \beta_4(INF_ASY_{it}) + \beta_5(OWN_CON_{it}) + \beta_6(NED_{it}) + \mu_{it}$

Where;

CHOICE is Accounting Choice,

β_0 represent the fixed intercept,

β_{1-6} is the coefficient of the independent variables,

LEV denotes Leverage,

SIZE denotes Firm Size,

BONUS denotes Bonus plan

INF_ASY denotes Information Asymmetry

OWN_CON denotes Ownership Concentration, and

NED denotes Non-Executive Directors

i represents the number of firms in the panel data,

t represents the time period of the panel data and

μ is the error term.

The following is the model formulated for this study;

$$IPC_{it} = \beta_0 + \beta_1(LEV_{it}) + \beta_2(FSIZE_{it}) + \beta_3(OWN_CON_{it}) + \beta_4(LIQDITY_{it}) + \beta_5(NED_{it}) + \mu_{it}$$

Where;

IPC represent Investment Property Choice Proxied by ROA which denotes Return on Asset

LEV represents Leverage

FSIZE represents Firm size

OWN_CON represents Ownership concentration

LIQDITY represents Liquidity

NED represents Non- Executive Director

i represents the number of firms in the panel data,

t represents the time period of the panel data and

μ is the error term.

β_0 represent the fixed intercept,

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

β_1 -5 are the coefficient of the independent variables

From the above, it is expected that Leverage, firm size, Ownership concentration, Liquidity and will significantly have effect on Investment Property Choice proxied with Return on Assets.

A priori expectation is stated as follows;

$\beta_0 > 0, \beta_1 > 0, \beta_2 >, \beta_3 >, \beta_4 > \beta_5 > 0$

3.2 Table 1: Summary of variables, measurement and sources

S/N	VARIABLES	DESCRIPTION	MEASUREMENT	SOURCES
1.	Independent:			
	Leverage	This is the degree to which a firm's capital structure comprises more of long term debt as against equity.	It was measured as $LEV = \frac{\text{long term debt}}{\text{Total Equity}}$	Lin et al., 2013, Krivogorsky, 2006
	Ownership concentration	It represents the proportion of stocks owned by shareholders and Debt	It was measured as Percentage share of the largest shareholder	Alves, 2019, Hamadi and Heinen, 2015
	Liquidity	This provided information about a company's current assets compared to their current liabilities	It was measured as the current ratio	Nikolau, 2009
	Non-Executive Director	They are independent board members who are not part of the Executive team	It was measured as the ratio between the number of non-executive directors and the total number of board members of firm	Alves, 2019
	Control Variable:			
	Firm size	This represents the size of the companies	It was measured by natural algorithms of total asset	Olarewaju and Olayiwola, 2019
2.	Dependent:			
	Return on Asset	This provided information about firm performance, and how well a firm uses its equity and assets to generate profits	It was measured as $ROA = \frac{\text{Net Income}}{\text{Total Assets}}$	Enekwe et al., 2014

Source: Researchers' Compilation (2024)

4. RESULTS AND DISCUSSION OF FINDINGS

4.1. Discreptive Statistics

Descriptive statistics that indicate how the data interact are shown in Table 2. The data shown comprises the mean, variance, minimum, maximum, and average values for the outcome and explanatory variables. This study's descriptive statistics include important characteristics such as the variables' minimum, maximum, mean, standard deviation, coefficient of variation, total, skewness, and kurtosis.

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

Table 2 shows that the standard deviation of the investment property accounting choice (IVPC) is .3294 and the mean value is .1236. Given that the standard deviation value is near the mean, this suggests that the non-financial enterprises in the sample have somewhat different investment property accounting choices. The coefficient of variation, which shows a 26.64% degree of variance with a coefficient of variation of 2.664, supports this. Furthermore, the IVPC ranges from 0 at the lowest to 1 at the most. For the mentioned non-financial entities, the total IVPC is 68. The investment property accounting option (IVPC) has a positive skewness and anomalous kurtosis values of 2.286 and 6.229, respectively. The variable data is not regularly distributed, as indicated by these values.

Leverage (LEV) has a mean value of 67.884 and a standard deviation of 32.896. Given that the standard deviation deviates greatly from the mean, this suggests that the LEV values among the studied firms differ considerably from one another. A large degree of variance is shown by the coefficient of variation, which is 48.46 percent. The LEV has a minimum value of 23.26 and a maximum value of 196.25. The listed non-financial entities have a total LEV of 37336.29. The data exhibits positive skewness, with leverage (LEV) having kurtosis values of 1.926853 and 6.104607, respectively. The variable is not regularly distributed, as indicated by these values.

Furthermore, Table 2 indicates that the standard deviation of the current ratio (CRT) is .7362702 and its average value is 1.180691. This suggests that there are moderate differences in the current ratios of the non-financial enterprises in the sample. With a coefficient of variation of .6235927, the relative variability is measured by the coefficient of variation, which is 62.35 percent. There is a minimum of .12 and a maximum of 2.98 for the current ratio. For the non-financial firms listed, the cumulative return on total assets (CRT) is 649.38. The variable is not normally distributed since the data shows positive skewness and a normal kurtosis value of 0.7443462 and 3.0043, respectively. The company size (FMZ) has an average value of 7.1089 and a standard deviation of .9256, as shown in Table 2. Taking into account their deviation from the average, this suggests that the firm sizes of the tested enterprises varied significantly from one another. With a coefficient of variation of 0.1302, the variability is around 13.02%. The FMZ reaches a maximum of 9.07 and a minimum of 5.03. For the non-financial enterprises listed, the total FMZ amount is 3909.91. The variable's kurtosis peak is normal, as indicated by the negative skewedness score (-0.0506061). Given the variable's kurtosis value of 2.339674, it can be inferred that the data adheres to a normal distribution.

Table 2 shows that the board independence (BDI) has a standard deviation of 13.10507 and an average value of 70.77529. Taking into account the deviation from the average, this suggests that the firm sizes of the tested enterprises range greatly from one another. The coefficient of variation is 0.1851645, meaning that the variance is around 18.51%. There is a minimum of 40 and a maximum of 102.1 on the BDI. For the non-financial enterprises listed, the total BDI value is 38926.41. The data exhibits negative skewness, suggesting a normal distribution with a kurtosis peak. The score of 2.759295 for kurtosis and -0.1865437 for skewedness indicates that the variable data is normally distributed. Table 2 shows that the ownership concentration (OWC) has a standard deviation of 21.60073 and an average value of 52.75818. This shows that, in comparison to the average value, the ownership concentration of the examined enterprises varies considerably from one another. With a coefficient of variation of 0.4094291, the variability is around 40.94%. The OWC ranges from 0 at the lowest to 98 at the highest. For the non-financial firms listed, OWC's cumulative value is 29017. The variable's negative skewness suggests a normal distribution with a kurtosis peak. The data for the variable exhibits a normal distribution, as indicated by the values of 2.975841 for kurtosis and -.5602647 for skewness.

Table 2: Descriptive Statistics

Variables	IVPC	LEV	CRT	FMZ	BDZ	OWC
Obs	550	550	550	550	550	550
Mean	.1236	67.884	1.180691	7.1089	70.77529	52.75818
Std. Dev.	.3294	32.896	.7362702	.9256	13.10507	21.60073
C.V	2.664	.48460	.6235927	.1302	.1851645	.4094291
Min	0	23.26	.12	5.03	40	0
Max	1	196.25	2.98	9.07	102.1	98
Sum	68	37336.29	649.38	3909.91	38926.41	29017
Skewness	2.286	1.926853	.7443462	-.0506061	-.1865437	-.5602647
Kurtosis	6.229	8.104607	3.0043	2.339674	2.759295	2.975841

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

Researchers' Computation (2024)

4.2. Test of Variables

4.2.1. Normality Test

Doing a linear model requires assuming a normal distribution of data. This presumption guarantees the accuracy of the p-values derived from the t-test and F-test. All that is required under the assumption is that the residuals have an independent and comparable distribution. The Shapiro-Wilks test of normality was used to determine whether the residuals were normal, and table 3 shows the results. A statistical technique called the Shapiro-Wilk test is used to determine whether the distribution of data as a whole differs from a comparable normal distribution. The fact that sample means from independent samples have a normal distribution as their distribution is seen leads to this assumption. If the test yields a result that is not statistically significant ($p > .05$), it means that the sample distribution is similar to a normal distribution. The SK test was carried out to further ensure that the result was accurate. Because these two tests have benefits over other normality tests, including the Kolmogorov-Smirnov tests, they were chosen. Table 3's results indicate that, at a significance level of 5%, the variables pertaining to environmental accounting procedures and financial success had p-values greater than 0.05.

Table 3: Shapiro-Wilk W Test for Data Normality

Variables	Obs	W	V	z	Prob>z
residuals	24	0.94766	1.412		0.703 0.24092

Skewness/Kurtosis		tests for Normality			
-----joint -----					
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
residual	24	0.0792	0.1570	5.01	0.0816

Source: Researchers' Computation (2024)

The linear relationship between the dependent and explanatory variables was investigated using the correlation coefficient. Finding the likelihood of multicollinearity among the research variables—which could have a big influence on the variables' standard error—was another helpful application of the correlation analysis. With a value of -0.2472, Table 3 shows a negative association between leverage (LEV) and investment property accounting choice (IVPC). This indicates that there will be a 24.72 percent decline in non-financial enterprises' preference for fair value measurement in accounting for investment property if they have significant levels of borrowing. At the five percent significance level, the connection has a probability value of 0.0000 and is statistically significant. The choice of accounting for investment property (IVPC) and the current ratio (CRT) have a positive link (coefficient = 0.2470). This indicates that the probability of opting to account for investment property in compliance will rise by 24.70% with an increase in liquidity. A p-value of 0.0000 further indicates that the link is statistically significant at a 5% level.

Similarly, among the non-financial enterprises studied, Table 4 shows a favorable association between company size (FMZ) and the choice of investment property accounting (IVPC). The coefficient value is 0.0281, meaning that the probability of employing fair value measurement for investment property accounting will rise by 2.81 percent for every one-time increase in business size. The likelihood value of 0.5100, however, indicates that this link is not statistically significant at the 5 percent level. Likewise, Table 4 data indicates that among the non-financial enterprises sampled, there is a negative link between the choice of investment property accounting (IVPC) and board independence (BDI). The coefficient value is -0.0330, meaning that the use of the fair value technique for investment property accounting will drop by 3.30 percent for every one-time rise in board independence. The likelihood value of 0.4402, however, indicates that this link is not statistically significant at the 5 percent level. With a coefficient of -0.2231 and a P-value of 0.000, the association between ownership concentration (OWC) and investment property accounting choice (IVPC) is statistically significant and substantially negative. This suggests that the use of fair value measurement as the preferred method of accounting for investment property will decline by 22.31 percent for every rise in ownership concentration among the studied firms.

With a coefficient of -0.4854 and a P-value of 0.0000, it is determined that there is a negative and statistically significant relationship between leverage (LEV) and current ratio (CRT). This suggests that the leverage would drop by 48.54 percent for every unit increase in the current ratio. Firm size (FMZ) and leverage (LEV) have a statistically significant negative association, with a P-value of 0.0155 and a coefficient value of -0.1032. This implies that the leverage will drop by 10.32 percent for every unit rise in

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

the company's size. Board independence (BDI) and leverage (LEV) have a positive link (coefficient of 0.0589). This implies that a 5.89 percent increase in leverage will follow an improvement in board independence. A P-value of 0.1675, on the other hand, indicates that this link is not statistically significant at the five percentile. Furthermore, a negative correlation of -0.0127 and a P-value of 0.7656 is found between ownership concentration (OWC) and leverage (LEV). With the exception of the relationship between current ratio and firm size, the observed explanatory factors—such as ownership concentration, board independence, and business size—have a usually favorable association. Furthermore, as none of the explanatory variables surpass the anticipated threshold of 0.7, the relationship between them does not suggest the existence of multicollinearity.

Table 4: Correlation Analysis of Study Variables

	IVPC	LEV	CRT	FMZ	BDI	OWC
IVPC	1.0000					
LEV	-0.2472*	1.0000				
	(0.0000)					
CRT	0.2470*	-0.4854*	1.0000			
	(0.0000)	(0.0000)				
FMZ	0.0281	-0.1032*	-0.1311*	1.0000		
	(0.5100)	(0.0155)	(0.0021)			
BDI	-0.0330	0.0589	0.0317	0.0110	1.0000	
	(0.4402)	(0.1675)	(0.4588)	(0.7975)		
OWC	-0.2231*	-0.0127	0.0352	0.2325*	0.1830*	1.0000
	(0.0000)	(0.7656)	(0.4095)	(0.0000)	(0.0000)	

Source: Researchers' Computation (2024)

The results of a logistic regression analysis that looks at the variables impacting accounting choices for investment real estate among Nigerian non-financial enterprises are shown in Table 5. A model's overall adequacy is assessed by the Bayesian Information Criterion (BIC), which also makes it possible to compare nested and non-nested models. The results imply that the model works well. The large Likelihood ratio provides more support for this. There is a strong correlation between the independent and dependent variables, as indicated by the pseudo R². Additionally, it indicates that there is a maximum likelihood of 16.13 percent for the combination of independent variables to affect the decision of accounting for investment property. With an 87% accuracy rate in the result's classification, the accounting option for investment property has an 87% sensitivity and predictive value.

The overall conclusion, as shown in Table 5, indicates that certain firm characteristics may have an impact on how they decide how to account for investment property. The leverage coefficient is negative and statistically significant based on the individual results; it has a p-value of 0.009, a z-statistic of -2.63, and a coefficient value of -0.0196789. This suggests that businesses using more leverage are more likely to measure investment property using a different metric than fair value. The investigation shows that the selection of investment property accounts is positively and significantly impacted by the current ratio. The p-value is 0.0002, the z-statistic is 3.08, and the coefficient value is 0.6332582. When deciding whether to apply fair value measurement for investment property accounting, as required by the IFRS standard, the firm's liquidity plays a major role.

The choice of fair value technique for evaluating investment properties is positively correlated with firm size, as revealed by statistical investigation. With a P-value of 0.027 and a z-statistic of 2.22, the coefficient is 0.3456214. This suggests that the fair value method is more likely to be selected by larger businesses. Therefore, it is likely that large firms view higher fair value model performance ratios as advantageous for their capacity to obtain outside finance and the price at which they may do so. In a similar vein, the existence of an independent board influences investment property accounting choices in a favorable but insignificant way. The z-statistic is 0.01; the probability value is 0.990; and the coefficient value is 0.0001404. This suggests that the choice of accounting for investment property is not significantly influenced by board independence. Moreover, a high degree of ownership concentration negatively and significantly affects the accounting decisions made by non-financial companies that are publically traded. This is because a company that has a concentrated ownership structure is less likely to base its accounting decisions on the International Financial Reporting Standards (IFRS). The data shown in Table 5, which show a coefficient value of -0.0343078, a z-statistic of -5.43, and a probability value of 0.000, provide evidence for this. This implies that businesses are less likely to follow the fair value approach when assessing investment property if their ownership concentration is larger.

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

The study's findings corroborate those of Alves (2019), which identify leverage and business size as key factors that impact a firm's accounting option for the treatment of investment property.

Table 5: Logistic Regression Results

IVPC	Coef.	Std. Err.	Z	P>z
LEV	-.0196789	.0074782	-2.63	0.009
CRT	.6332582	.2053162	3.08	0.002
FMZ	.3456214	.1557898	2.22	0.027
BDI	-.0006701	.0098198	-0.07	0.946
OWC	-.0343078	.0063231	-5.43	0.000
_cons	-2.429381	1.388554	-1.75	0.080
Number of Obs =	550	Pseudo R2 =		0.1613
LR chi2(5) =	66.40	Prob >chi2 =		0.0000
Correctly Classified	- 87.27%	Variance of error:		3.290
Pearson chi2(543) =	1115.0			
Prob > chi2 =	0.0000			
McFadden's R2: 0.161		McFadden's Adj R2: 0.132		
AIC: 0.649		BIC: -3087.469		

Source: Researchers' Computation (2024)

5. CONCLUSION AND RECOMMENDATIONS

In order to investigate the determinants influencing Nigerian listed businesses' selection of investment properties, this study empirically examined these businesses on the Nigeria Exchange Group (NGX). This study looked at the following factors: By figuring out the ratio of long-term debt to total equity, leverage is measured. The percentage of shares held by the largest shareholder served as a proxy for ownership concentration. We evaluated liquidity by utilizing the current ratio. The presence of non-executive directors was quantified by counting both their number and the total number of board members. The natural logarithm of the total assets of the company was used to calculate its size. This study's primary goal is to investigate the relationship between the variables that affect investment property selection and how those variables affect the decisions made by publicly traded companies in Nigeria. The findings have significance as they could also be pertinent for regulators considering modifications to rules pertaining to the adaptability of accounting practices and the disclosures required to support financial statement users. Regression analysis in this study indicates that a firm's accounting choice regarding the classification of investment property is influenced by drivers of investment property choice, which are significant factors.

As a result, businesses should consider implementing technology that could facilitate the process of selecting investment properties. Furthermore, the application of artificial intelligence, advanced data analytics, or other technical techniques to improve an organization's ability to assess and choose investment assets. It is also feasible to set up a system that would track and assess investment property choices on an ongoing basis. The goal of this approach would be to develop robust, proactive plans that consider both short-term financial gain and long-term viability.

REFERENCES

- 1) Akinadewo, I. S., Ajibola, O. A., Obamoyegun, O. J., Adeosun, O. T., & Akinadewo, J. O. (2023). Determinants of finance lease capitalisation accounting choice: an empirical investigation of Nigeria listed firms. *Journal of Harbin Engineering University*, 44(10), 740-754.
- 2) Alehegn, D. S. (2020). The determinants of private investment in case of Mekene-Eyesus administration Town, Ethiopia. *International Journal of Academic Management Science Research (IJAMSR)* 4(7), 91-108.
- 3) Alves, S. (2019). Accounting for investment property: Determinants of accounting policy choice by Portuguese listed firms. *International Journal of Accounting and Taxation*, 7(2), 1-10. <https://doi.org/10.15640/ijat.v7n2a1>
- 4) Awa, K. N., Nnametu, J. & Emoh, F. I. (2019). Global determinants of direct real estate investment returns in Nigeria *PM World Journal*, 8(10), 1-13.

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

- 5) Bustami, F. & Heikal, J. (2019) Determinants of return stock company real estate and property located in Indonesia stock exchange. *International Journal of Economics and Financial*, 9(1), 79-86. DOI: <https://doi.org/10.32479/ijefi.7445>
- 6) Chinnasamy, G., Madbouly, A. A. H. & Aro-Gordon, S. (2019). The determinants of investment strategy: An empirical assessment of behavioural factors in the Omani context. *ACRN Journal of Finance and Risk Perspectives* 8, 256-274. <https://doi.org/10.35944/jofrp.2019.8.1.016>
- 7) Dwiatmanto (2020). The Relationship Between Leverage and The Value of Real Estate Companies Listed. *International Journal of Scientific & Technology Research*,9(11), 36- 45.
- 8) Endri, E., Amrullah, D. F., Suparmun, H., Hilda, M., Sova, M. & Indrasari, A. (2021). Determinants of stock return of property and real estate companies in the developing market. *Corporate Governance and Organizational Behavior Review*, 5(2), 184-193. <https://doi.org/10.22495/cgobrv5i2sip6>
- 9) Gofe, T. E. (2018). "Assessments of the determinants of investment activities in Nekemte town." *International Journal of Research - Granthaalayah*, 6(11), 366-383. <https://doi.org/10.5281/zenodo.2228386>
- 10) Idekbulim, P. C. (2019). *Teach yourself IFRS*. PICCAS GLOBAL CONCEPT, 19, Afolabi Brown Street, Akoka Yaba, Lagos, 427-438
- 11) IFRS Foundation (2022). *Investment property*. International Accounting Standard IAS 40, IASB BASIS FOR CONCLUSIONS ON IAS 40 (AS REVISED IN 2003), 1-28.
- 12) Olante, M. E. & lassini, U. (2022). Investment property: Fair value or cost model? Recent evidence from the application of IAS 40 in Europe. *Advances in Accounting*, 56(2), <https://doi.org/10.1016/j.adiac.2021.100568>
- 13) ŞİT, M. (2019). The determinants of foreign direct investments in real estate: Turkey case. *The Journal of Social Sciences Research*, 5(3), 789-795. DOI: <https://doi.org/10.32861/jssr.53.789.795>
- 14) Smit, A., Niet, B. v-d & Botha, M. (2022). Evaluating The Effect of Fair Value Adjustments to Investment Property Based on Profitability Ratios. *Journal of Accounting and Investment*, 23(2), 330-347. DOI: 10.18196/jai.v23i2.14404
- 15) Wiratama, R. & Asri, M. (2020). A literature review: Positive accounting theory (pat). S&P Global Market Intelligence Research Paper Series, 1-10. <https://ssrn.com/abstract=3523571> <http://dx.doi.org/10.2139/ssrn.3523571>

Appendix

```
. logit INVESTMENTPROPERTYMETHOD Leverage CurrentRatio FIRMSIZE BoardIndependence
> OWNERSHIPCONCENTRATION
```

```
Iteration 0: log likelihood = -205.75947
Iteration 1: log likelihood = -177.8849
Iteration 2: log likelihood = -172.67372
Iteration 3: log likelihood = -172.5634
Iteration 4: log likelihood = -172.56307
Iteration 5: log likelihood = -172.56307
```

```
Logistic regression                                Number of obs   =           550
                                                    LR chi2(5)      =           66.39
                                                    Prob > chi2     =           0.0000
Log likelihood = -172.56307                       Pseudo R2       =           0.1613
```

INVESTMENTPR~D	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Leverage	-.0196843	.0074764	-2.63	0.008	-.0343379 - .0050308
CurrentRatio	.632972	.2054832	3.08	0.002	.2302323 1.035712
FIRMSIZE	.3442988	.1559425	2.21	0.027	.0386571 .6499405
BoardIndepen~e	.0001404	.0111882	0.01	0.990	-.0217881 .022069
OWNERSHIPCON~N	-.0343556	.006337	-5.42	0.000	-.0467758 -.0219354
_cons	-2.473777	1.408588	-1.76	0.079	-5.234559 .2870042

Determinants of Investment Property Choice: an Empirical Analysis of Nigeria Listed Firms

Measures of Fit for logit of INVESTMENTPROPERTYMETHOD

Log-Lik Intercept Only:	-205.759	Log-Lik Full Model:	-172.563
D(544):	345.126	LR(5):	66.393
		Prob > LR:	0.000
McFadden's R2:	0.161	McFadden's Adj R2:	0.132
Maximum Likelihood R2:	0.114	Cragg & Uhler's R2:	0.216
McKelvey and Zavoina's R2:	0.305	Efron's R2:	0.157
Variance of y*:	4.735	Variance of error:	3.290
Count R2:	0.873	Adj Count R2:	-0.029
AIC:	0.649	AIC*n:	357.126
BIC:	-3087.469	BIC':	-34.843



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.