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INTERNAL CONTROL SYSTEMS AND FINANCIAL PERFORMANCE OF LISTED CONSTRUCTION AND REAL ESTATE COMPANIES IN NIGERIA.

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Abstract
The study examined the effect of internal control systems on the financial performance of listed construction and real estate companies in Nigeria. Specifically, it investigated the effects of control environment and risk assessment on Return on Assets (ROA) and Return on Equity (ROE). The study adopted an ex post facto research design and used secondary data obtained from the published annual reports of 10 selected companies listed on the Nigerian Exchange Group for the period 2021–2025, resulting in 50 firm-year observations. Data were analyzed using descriptive statistics and panel least squares regression with EViews. The findings revealed that control environment had a positive but statistically insignificant effect on both ROA and ROE, with coefficients of 0.2404 (\ (p = 0.1982\)) and 0.3836 (\ (p = 0.4252\)), respectively. In contrast, risk assessment had a negative and statistically significant effect on ROA and ROE, with coefficients of −0.4625 (\ (p = 0.0005\)) and −1.1431 (\ (p = 0.0009\)), respectively. The study concludes that the relationship between internal control systems and financial performance varies across control components. It recommends that companies strengthen their control environments through improved governance, ethical standards, and accountability mechanisms while implementing cost-effective risk assessment procedures to minimize unnecessary monitoring and compliance costs without compromising risk management effectiveness.

Keywords: Internal Control Systems, Control Environment, Risk Assessment, Financial Performance, Return on Assets, Return on Equity.

Introduction
In Nigeria, listed construction and real estate companies are expected to record stable and improving financial performance due to their strategic role in infrastructure development, capital formation, and economic growth. With effective internal control systems, particularly strong control environments, and robust risk assessment practices, such firms should be able to manage operational risks, ensure efficient utilization of assets, prevent financial mismanagement, and generate satisfactory returns for shareholders. Previous studies indicate that effective internal control systems enhance profitability, accountability, and efficient resource utilization, which ultimately improve financial performance measured through indicators such as Return on Assets (ROA) and Return on Equity (ROE) (Channar et al., 2015; Nyakundi et al., 2014).

However, the observed situation in many developing economies, including Nigeria, deviates from this ideal expectation. Despite the existence of regulatory frameworks and internal control guidelines, many construction and real estate companies continue to experience weak financial performance manifested in declining profitability, inefficient asset utilization, cost overruns, project delays, and financial inefficiencies. Studies have linked these challenges to weaknesses in the control environment, inadequate risk assessment practices, and poor internal governance structures, which expose firms to fraud, misallocation of resources, and unstable financial outcomes (Endeshaw, 2021; Kisanyanya, 2018; Mungai, 2022).

In construction-related organizations, ineffective risk assessment has been shown to heighten exposure to project execution risks and financial losses, thereby negatively affecting ROA and overall financial sustainability (Endeshaw, 2021). Furthermore, although several studies have examined internal control systems and financial performance across sectors and countries, most existing studies treat internal control systems as a composite variable, with limited focus on the individual effects of specific components such as control environment and risk assessment. In addition, many of these studies are concentrated on financial institutions, public sector entities, or small and medium enterprises outside Nigeria, thereby limiting their applicability to listed construction and real estate companies in the Nigerian context (Channar et al., 2015; Nyakundi et al., 2014; Kisanyanya, 2018). This creates a clear empirical gap in understanding how control environment and risk assessment specifically influence financial performance, particularly when measured using Return on Assets (ROA), among listed construction and real estate companies in Nigeria. Addressing this gap is necessary to provide evidence-based insights for improving corporate governance, risk management, and financial performance within the sector.

Objectives of the Study

The overall aim of this study is to examine the effect of internal control systems on the financial performance of listed construction and real estate companies in Nigeria. These objectives are;

1. To examine the effect of Control environment on Return on Assets (ROA) in listed construction and real estate companies in Nigeria.
2. To determine the effect of Control environment on Return on Equity (ROE) in listed construction and real estate companies in Nigeria
3. To examine the effect of Risk assessment on Return on Assets (ROA) in listed construction and real estate companies in Nigeria
4. To determine the effect of Risk assessment on Return on Equity (ROE) in construction and real estate companies in Nigeria

Research Questions

1. What is the effect of control environment on Return on Assets (ROA) in listed construction and real estate companies in Nigeria?
2. What is the effect of control environment on Return on Equity (ROE) in listed construction and real estate companies in Nigeria?
3. What is the effect of Risk assessment on Return on Assets (ROA) in listed construction and real estate companies in Nigeria?
4. What is the effect of Risk assessment on Return on Equity (ROE) in listed construction and real estate companies in Nigeria?

Research Hypotheses

H_{o1}: Control environment has no significant effect on Return on Assets (ROA) of listed construction and real estate companies in Nigeria.

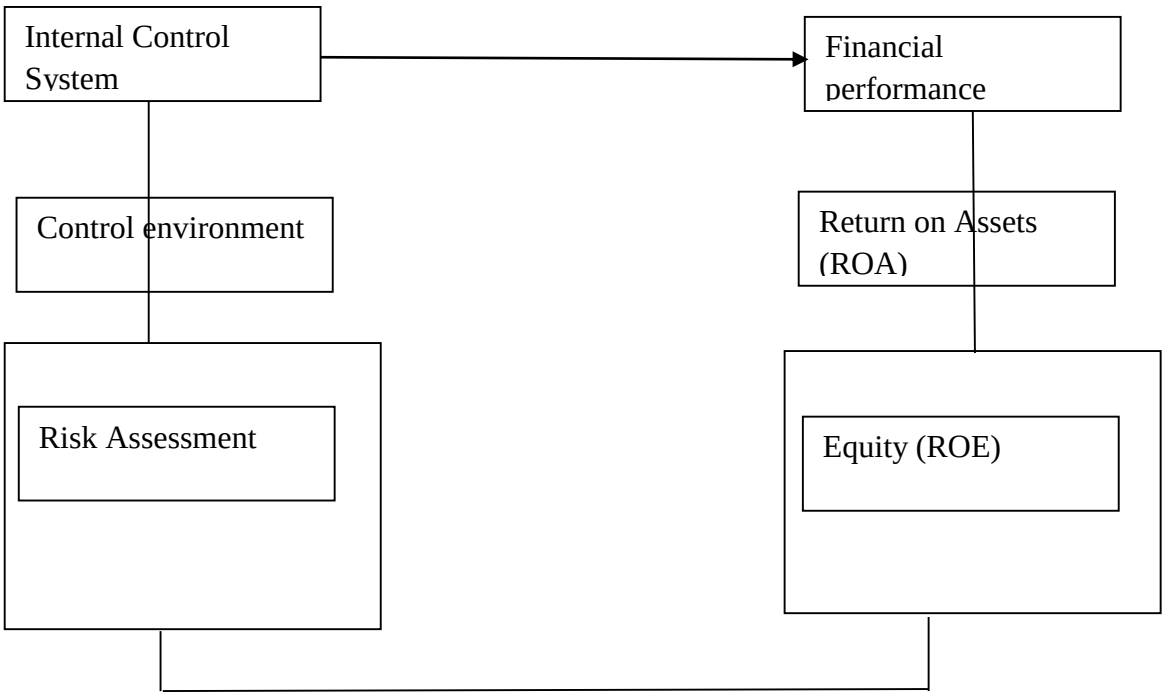
H_{o2}: Control environment has no significant effect on Return on Equity (ROE) of listed construction and real estate companies in Nigeria.

H_{o3}: Risk assessment has no significant effect on Return on Assets (ROA) of listed construction and real estate companies in Nigeria.

H_{o4}: Risk assessment has no significant effect on Return on Equity (ROE) of listed construction and real estate companies in Nigeria.

Conceptual Framework

This section presents a detailed review of the major concepts relevant to the study. The discussion is structured around the study variables, namely internal control system, control environment, risk assessment, and financial performance, as well as the specific measures of financial performance adopted in the study, which are Return on Assets (ROA) and Return on Equity (ROE). The conceptual review provides a theoretical understanding of these concepts and establishes how they relate to the financial performance of listed construction and real estate companies in Nigeria.



Source: Researcher (2026)

REVIEW OF RELATED LITERATURE

Internal Control System

An internal control system refers to a coordinated set of policies, procedures, and organizational practices designed to ensure efficient operations, safeguard organizational assets, ensure the reliability of financial reporting, and promote compliance with applicable laws and regulations. According to the Committee of Sponsoring Organizations of the

Treadway Commission (COSO, 2017), internal control is a process effected by an organization's board of directors, management, and other personnel, aimed at providing reasonable assurance regarding the achievement of operational, reporting, and compliance objectives. This definition emphasizes that internal control is continuous and embedded in daily organizational activities rather than a one-time event.

Beyond safeguarding assets and ensuring compliance, internal control systems also serve as strategic tools that support organizational planning and performance evaluation. According to COSO (2017), internal controls facilitate the alignment of operational activities with organizational objectives by providing timely and reliable information for decision-making. Effective internal control systems enable management to detect performance deviations early and implement corrective actions promptly. In construction and real estate firms, where projects span long durations and involve significant capital outlays, internal controls enhance budgetary discipline and cost monitoring. Channar et al. (2015) emphasize that organizations that integrate internal controls into strategic management processes are more likely to achieve consistent financial performance and operational stability.

Control Environment

The control environment represents the foundation of an organization's internal control system and reflects the overall attitude, integrity, and ethical values of management and those charged with governance. According to COSO (2017), the control environment sets the tone of the organization and influences the control consciousness of employees at all levels. It includes management philosophy, organizational structure, assignment of authority and responsibility, human resource practices, and commitment to ethical conduct. A strong control environment provides a supportive structure for the effective functioning of other internal control components.

The control environment also plays a critical role in corporate governance and oversight. Studies indicate that weak governance structures often weaken internal control effectiveness and reduce financial accountability (Kisanyanya, 2018). In construction and real estate companies, where operations are decentralized and transactions involve large monetary values, the control environment is particularly important. According to Endeshaw (2021), poor control environments in construction firms increase exposure to fraud and misappropriation of resources, while strong control environments enhance supervision, transparency, and financial performance.

Risk Assessment

Risk assessment refers to the systematic process through which organizations identify, analyze, and evaluate internal and external risks that may hinder the achievement of organizational objectives. According to COSO (2017), risk assessment involves determining the likelihood and potential impact of risks and developing appropriate responses to manage them. It is a continuous process that must adapt to changes in the economic, regulatory, and operational environment. Effective risk assessment enables organizations to anticipate uncertainties and respond proactively rather than reactively. Organizations are exposed to various risks, including operational, financial, market, regulatory, and strategic risks. According to Nyakundi, Nyamita, and Tinega (2014), firms with weak risk assessment practices are more vulnerable to financial instability and unexpected losses. Effective risk assessment improves planning, strengthens control activities, and enhances overall

organizational resilience. By identifying risks early, management can allocate resources efficiently and implement control measures that minimize adverse financial outcomes.

Financial Performance

Financial performance refers to the extent to which an organization efficiently utilizes its resources to generate profits and achieve its financial objectives. According to Nyakundi et al. (2014), financial performance reflects management's effectiveness in deploying assets and capital to create value for stakeholders. It serves as a key indicator of organizational success, sustainability, and competitiveness. Strong financial performance signals effective management practices, while weak performance may indicate operational inefficiencies or governance failures. Measuring financial performance is essential for evaluating managerial efficiency, guiding investment decisions, and assessing long-term viability.

Return on Assets (ROA)

Return on Assets (ROA) is a profitability ratio that measures how efficiently an organization utilizes its total assets to generate profit. It is computed as profit after tax divided by total assets. According to Channar et al. (2015), ROA provides insight into management's ability to convert assets into earnings, making it a key indicator of operational efficiency. A higher ROA suggests effective asset utilization, while a lower ROA may indicate inefficiencies or underutilized resources. ROA is particularly relevant for construction and real estate firms because these companies operate with large asset bases, including land, equipment, and infrastructure projects. According to Endeshaw (2021), effective internal controls and sound risk management practices enhance asset utilization, leading to improved ROA. Poor asset management, however, often results in idle resources and declining profitability.

Return on Equity (ROE)

Return on Equity (ROE) is a profitability ratio that measures an organization's ability to generate profit from shareholders' equity. It is calculated as profit after tax divided by shareholders' equity. According to Channar et al. (2015), ROE reflects how effectively management uses owners' funds to generate returns, making it a critical indicator of shareholder wealth maximization. ROE is particularly important to investors because it indicates the efficiency of equity financing. According to Nyakundi et al. (2014), firms with strong internal control systems and effective governance structures tend to record higher ROE due to improved profitability and reduced financial losses. Consistently high ROE enhances investor confidence and market valuation.

Theoretical Framework

Agency Theory

Agency Theory was propounded by Jensen and Meckling (1976). The theory explains the relationship between principals (shareholders) and agents (managers), where managers are engaged to operate the firm on behalf of the owners. It assumes that managers may pursue personal interests that conflict with the goal of maximizing shareholders' wealth, especially when there is information asymmetry between the two parties. As a result, principals institute control mechanisms to monitor managerial behavior and reduce opportunistic actions.

The theory further emphasizes that agency problems arise when monitoring is weak or ineffective. In such situations, managers may engage in inefficient investment decisions,

misuse organizational resources, or manipulate financial reports. To reduce these risks, organizations rely on internal control systems that establish accountability, transparency, and clear reporting structures. Control mechanisms such as defined authority lines, ethical standards, and performance monitoring are therefore central to minimizing agency conflicts and improving organizational outcomes.

Agency Theory is relevant to this study because internal control systems serve as tools for mitigating agency problems in listed construction and real estate companies. A strong control environment promotes ethical behavior and accountability, while effective risk assessment reduces uncertainty and managerial discretion. By strengthening these controls, firms can improve asset utilization and profitability, thereby enhancing financial performance measured by Return on Assets (ROA) and Return on Equity (ROE).

Review of Empirical Literature

Racheva and Malachi (2017) examine the effect of internal control systems on financial performance among listed manufacturing firms in Lagos, Nigeria. The study seeks to determine how internal control components influence profit efficiency. A sample of 120 financial reports was determined using stratified random sampling from the study population of 30 listed manufacturers. The primary method of data collection was the use of secondary financial data from audited reports, while the collected data was analyzed using multiple regression analysis. The study revealed that internal control systems significantly influence profitability. The study therefore concluded that strong internal controls improve financial performance. The study recommended among others that firms strengthen internal audit functions and risk assessment frameworks.

Okeke and Afolabi (2018) examine the relationship between risk assessment practices and financial performance of deposit money banks in Abuja, Nigeria. The study seeks to assess how risk assessment influences Return on Equity (ROE) and Return on Assets (ROA). A sample of 10 banks was determined using purposive sampling from the population of all licensed banks. The primary method of data collection was secondary financial statements, and the collected data was analyzed using panel data regression techniques. The study revealed that risk assessment has a positive and significant effect on both ROA and ROE. The study therefore concluded that effective risk evaluation enhances profitability. The study recommended among others that banks should institutionalize continuous risk monitoring systems.

Mensah and Adeyemi (2019) examine the impact of internal controls on financial performance in listed construction firms in Accra, Ghana. The study seeks to determine how internal control components influence operational efficiency and profitability. A sample of 80 firm-years was determined using systematic sampling from the population of 20 listed construction companies. The primary method of data collection was secondary data from annual reports, and the collected data was analyzed using correlation and regression analysis. The study revealed that robust internal control mechanisms positively influence financial performance. The study therefore concluded that improved controls reduce operational inefficiencies. The study recommended that firms should strengthen governance structures to enhance financial outcomes.

METHODOLOGY

Research Design

This study adopts an ex post facto research design to examine the effect of internal control systems on the financial performance of listed construction and real estate companies in Nigeria. The ex post facto design is appropriate because the variables under investigation, internal control components and financial performance have already occurred and cannot be manipulated by the researcher. The study relies on historical and published financial data to establish the relationship between the independent variables (control environment and risk assessment) and the dependent variable (financial performance measured by Return on Assets and Return on Equity).

Population of the Study

The population of this study comprises 12 listed construction and real estate companies on the Nigerian Exchange Group (NGX) as at December 31, 2025. These firms operate within Nigeria's industrial sector and are required to publish audited annual financial statements in compliance with NGX and regulatory standards.

Sample and Sampling Techniques

The sample size for this study consists of 10 listed construction and real estate companies selected from the population. A purposive sampling technique is employed to select the firms based on specific criteria. These criteria include: (i) continuous listing on the Nigerian Exchange Group throughout the study period, and (ii) availability of complete and consistent annual financial statements for at least five consecutive years. The purposive sampling technique is appropriate because it allows the researcher to select firms with relevant and accessible data on internal control disclosures and financial performance, thereby enhancing the validity and reliability of the findings.

Method of Data Collection

Data for this study are collected from secondary sources, specifically the published annual reports and audited financial statements of the selected construction and real estate companies.

Method of Data Analysis

Data were analyzed using panel data regression techniques, specifically the fixed effects model, to account for firm-specific characteristics and time variations. The analysis were conducted using EViews statistical software.

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

Presentation

Table 4.1 Data Presentation

COMPANIES	*YEAR*	*ROA*	*ROE*	*CEN*	*RAS*
Skye Shelter Fund Real Estate Investment Trust (SFS REIT)	*2021*	*5.60*	*6.68*	*40.00*	*16.15*
	2022	*6.31*	*7.63*	*60.00*	*17.29*
	2023	*9.62*	*12.24*	*60.00*	*21.41*
	2024	*13.74*	*17.16*	*60.00*	*19.93*
	2025	*17.62*	*21.22*	*60.00*	*16.94*
Ronchess Global Resources Plc	*2021*	*26.12*	*34.27*	*33.33*	*23.76*
	2022	*4.95*	*5.34*	*33.33*	*13.71*
	2023	*-70.35*	*-90.99*	*30.00*	*22.68*
	2024	*-21.80*	*-48.59*	*33.33*	*55.12*
	2025	*-61.21*	*-292.58*	*44.44*	*79.08*
Union Homes Real Estate Investment Trust (UHOM REIT)	*2021*	*3.46*	*3.97*	*40.00*	*12.82*
	2022	*3.75*	*4.32*	*40.00*	*13.30*
	2023	*5.48*	*6.41*	*40.00*	*14.53*
	2024	*8.28*	*9.78*	*40.00*	*15.37*
	2025	*62.44*	*65.19*	*40.00*	*4.22*
AVA Infrastructure Fund (AVAIF)	*2021*	*8.00*	*8.25*	*20.00*	*3.00*
	2022	*9.00*	*9.28*	*20.00*	*3.00*
	2023	*12.00*	*12.18*	*20.00*	*1.50*
	2024	*15.15*	*15.17*	*16.67*	*0.12*
	2025	*17.28*	*17.65*	*16.67*	*2.14*
Nigeria Infrastructure Debt Fund (NIDF)	*2021*	*9.17*	*9.44*	*20.00*	*2.93*
	2022	*10.88*	*11.22*	*20.00*	*3.04*
	2023	*18.90*	*19.73*	*20.00*	*4.17*
	2024	*16.22*	*17.22*	*20.00*	*5.79*
	2025	*17.04*	*17.97*	*20.00*	*5.17*
Julius Berger Nigeria Plc	*2021*	*3.19*	*9.37*	*40.00*	*65.94*
	2022	*3.89*	*11.14*	*40.00*	*65.08*
	2023	*6.01*	*16.60*	*40.00*	*63.79*
	2024	*5.45*	*14.94*	*40.00*	*63.56*
	2025	*3.94*	*11.40*	*40.00*	*65.48*
Haldane McCall Plc	*2021*	*0.28*	*0.36*	*10.00*	*21.41*
	2022	*0.54*	*0.72*	*10.00*	*23.92*
	2023	*1.43*	*1.84*	*10.00*	*22.18*
	2024	*3.09*	*4.08*	*42.86*	*24.27*

	2025	*2.94*	*3.75*	*42.86*	*21.44*
Nigeria Real Estate Investment Trust (NREIT)	*2021*	*5.00*	*5.43*	*20.00*	*8.00*
	2022	*5.11*	*5.56*	*20.00*	*8.00*
	2023	*5.00*	*5.43*	*20.00*	*8.00*
	2024	*5.20*	*5.78*	*20.00*	*10.17*
	2025	*12.72*	*13.70*	*20.00*	*7.14*
Chapel Hill Denham Nigeria Infrastructure Fund (CNIF)	*2021*	*6.88*	*7.09*	*25.00*	*2.95*
	2022	*7.79*	*8.03*	*25.00*	*3.04*
	2023	*18.91*	*19.73*	*25.00*	*4.17*
	2024	*16.22*	*17.22*	*25.00*	*5.79*
	2025	*17.02*	*17.94*	*50.00*	*5.12*
MOFI Real Estate Investment Fund (MREIF)	*2021*	*5.85*	*6.14*	*16.67*	*5.00*
	2022	*7.20*	*7.58*	*16.67*	*5.00*
	2023	*7.50*	*7.89*	*16.67*	*5.00*
	2024	*7.50*	*7.89*	*16.67*	*5.00*
	2025	*10.61*	*11.36*	*16.67*	*6.57*

Source: Author's Compilation from Companies annual reports.

Data Analysis

Table 4.2: Regression Result for Return on Equity

Dependent Variable: ROE
Method: Panel Least Squares
Date: 24/10/26 Time: 09:19
Sample: 2021 2025
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CEN	0.383606	0.476847	0.804464	0.4252
RAS	-1.143050	0.320930	-3.561683	0.0009
C	11.58648	14.25839	0.812608	0.4205

R-squared	0.220217	Mean dependent var	2.422600
Adjusted R-squared	0.187034	S.D. dependent var	46.79447
S.E. of regression	42.19205	Akaike info criterion	10.38047
Sum squared resid	83667.95	Schwarz criterion	10.49519

Source: Author's Computation using Eviews 13

		Hannan-Quinn	10.4241
Log likelihood	-256.5116	criter.	5
			0.96583
F-statistic	6.636571	Durbin-Watson stat	5
Prob(F-statistic)	0.002893		

Table 4.3 presents the Panel Least Squares regression result showing the effect of Control Environment (CEN) and Risk Assessment (RAS) on Return on Equity (ROE). The regression result shows that Control Environment (CEN) has a positive coefficient of 0.383606, indicating that improvements in the control environment increase shareholders' returns. However, the probability value of 0.4252 exceeds the 5 percent significance level, indicating that the positive effect is not statistically significant.

The result also indicates that Risk Assessment (RAS) has a coefficient of −1.143050 with a probability value of 0.0009, which is less than the 5 percent significance level. This shows that Risk Assessment has a negative and statistically significant effect on Return on Equity. The finding implies that increased risk assessment activities significantly reduce shareholders' returns during the study period. The coefficient of determination (R^2 = 0.220217) indicates that approximately 22.02% of the variation in Return on Equity is explained jointly by Control Environment and Risk Assessment, while 77.98% is explained by other variables outside the regression model.
The F-statistical probability of 0.002893 indicates that the regression model is statistically significant. The Durbin-Watson statistic of 0.965835 suggests evidence of positive serial correlation in the residuals.

Decision Rule:
The study adopted a 5 percent (0.05) level of significance in testing the hypotheses. Where the probability value (p-value) is less than 0.05, the null hypothesis is rejected while the alternative hypothesis is accepted. Conversely, where the probability value is greater than 0.05, the null hypothesis is accepted.

H01: Control environment has no significant effect on Return on Assets (ROA) of listed construction and real estate companies in Nigeria. The regression result shows that Control Environment has a coefficient of 0.240431 and a probability value of 0.1982. Since the probability value is greater than 0.05, the null hypothesis is accepted. The study therefore concludes that Control Environment has a positive but statistically insignificant effect on Return on Assets of listed construction and real estate companies in Nigeria. Although improvements in the control environment tend to increase asset profitability, the effect is not statistically significant.

H02: Control environment has no significant effect on Return on Equity (ROE) of listed construction and real estate companies in Nigeria. The regression result shows that Control Environment has a coefficient of 0.383606 and a probability value of 0.4252. Since the probability value is greater than 0.05, the null hypothesis is accepted. The result indicates that Control Environment has a positive but statistically insignificant effect on Return on

Equity. This implies that although improvements in the control environment enhance shareholders' returns, the effect is not statistically significant.

H03: Risk assessment has no significant effect on Return on Assets (ROA) of listed construction and real estate companies in Nigeria. The regression result shows that Risk Assessment has a coefficient of −0.462475 and a probability value of 0.0005. Since the probability value is less than 0.05, the null hypothesis is rejected. The finding therefore indicates that Risk Assessment has a negative and statistically significant effect on Return on Assets. This implies that higher levels of risk assessment significantly reduce firms' returns on assets during the study period.

H04: Risk assessment has no significant effect on Return on Equity (ROE) of listed construction and real estate companies in Nigeria. The regression result indicates that Risk Assessment has a coefficient of −1.143050 and a probability value of 0.0009. Since the probability value is less than 0.05, the null hypothesis is rejected. The study therefore concludes that Risk Assessment has a negative and statistically significant effect on Return on Equity of listed construction and real estate companies in Nigeria. This finding suggests that increased risk assessment practices significantly reduce shareholders' returns over the period covered by the study.

Discussion of Findings

This study examined the effect of internal control system and financial performance of listed construction and real estate companies in Nigeria using Control Environment (CEN) and Risk Assessment (RAS) as measures of internal control systems, while Return on Assets (ROA) and Return on Equity (ROE) were used as indicators of financial performance. The study found that Control Environment has a positive but statistically insignificant effect on Return on Assets (ROA). This finding implies that improvements in the control environment enhance firms' ability to generate returns from their assets, although the influence is not sufficiently strong to be statistically significant. This finding agrees with the study of Mensah and Adeyemi (2019), who reported that internal control mechanisms positively influence financial performance by improving operational efficiency. It also supports the findings of Umeorah and Chukwu (2020), who concluded that a strong control environment contributes to improved profitability among business organizations.

The study further revealed that Risk Assessment has a negative and statistically significant effect on Return on Assets (ROA). This suggests that although risk assessment is an important component of internal control systems, increased risk assessment activities during the study period were associated with lower returns on assets. This finding contradicts the studies of Okeke and Afolabi (2018), Fatoki and Asaolu (2021), Raji and Abdullahi (2023), and Wangari and Ncube (2024), all of whom found that effective risk assessment significantly improves firms' financial performance. The disparity may be explained by the possibility that the sampled firms incurred substantial compliance, monitoring, and implementation costs associated with risk management, which reduced profitability in the short run. Differences in industry characteristics and the economic environment during the study period may also account for the variation in findings.

The regression analysis also showed that Control Environment has a positive but statistically insignificant effect on Return on Equity (ROE). This implies that strengthening governance structures, ethical standards, and organizational control procedures tends to improve shareholders' returns, although the improvement is not statistically significant. This finding is consistent with Racheva and Malachi (2017) and Ibrahim and Solomon (2023), who concluded that effective internal control systems improve organizational performance. However, the result differs from Bello and Ezekiel (2022) and Adebayo and Martins (2024), who found a statistically significant positive relationship between control environment and profitability.

Finally, the study established that Risk Assessment has a negative and statistically significant effect on Return on Equity (ROE). This indicates that increases in risk assessment activities significantly reduced shareholders' returns during the period covered by the study. This finding does not agree with the studies of Okeke and Afolabi (2018), Fatoki and Asaolu (2021), Raji and Abdullahi (2023), and Wangari and Ncube (2024), which reported that effective risk assessment contributes positively to firms' profitability and financial sustainability.

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

Summary of Findings

This study examined the effect of internal control system and financial performance of listed construction and real estate companies in Nigeria. Control Environment (CEN) and Risk Assessment (RAS) were used as proxies for internal control systems, while Return on Assets (ROA) and Return on Equity (ROE) served as measures of financial performance. Secondary data covering the period from 2021 to 2025 were obtained from the published annual reports of ten listed construction and real estate companies. The data were analyzed using descriptive statistics, correlation analysis, and Panel Least Squares regression analysis.

The findings revealed that Control Environment has a positive but statistically insignificant effect on Return on Assets. The study also found that Risk Assessment has a negative and statistically significant effect on Return on Assets. Furthermore, the study established that Control Environment has a positive but statistically insignificant effect on Return on Equity, while Risk Assessment has a negative and statistically significant effect on Return on Equity. These findings indicate that although an improved control environment tends to enhance financial performance, the effect is not statistically significant, whereas risk assessment significantly influences both measures of financial performance negatively.

CONCLUSION

Based on the empirical findings, the study concludes that internal control systems have mixed effects on the financial performance of listed construction and real estate companies in Nigeria. Although Control Environment exhibited a positive relationship with both Return on Assets and Return on Equity, the effects were not statistically significant. This suggests that improvements in governance structures, ethical values, and organizational control procedures alone may not be sufficient to produce significant improvements in firms' financial performance. The study further concludes that Risk Assessment has a negative and statistically significant effect on both Return on Assets and Return on Equity. This implies that while risk assessment is an essential component of effective internal control

systems, the costs associated with implementing comprehensive risk management practices may reduce firms' profitability in the short run. Nevertheless, effective risk assessment remains essential for promoting long-term organizational stability, minimizing operational risks, ensuring regulatory compliance, and protecting organizational assets.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

1. Management of listed construction and real estate companies should strengthen their control environment by improving corporate governance practices, ethical standards, internal supervision, and accountability systems to enhance operational efficiency and financial performance.
2. Companies should ensure that risk assessment activities are conducted in a cost-effective manner to minimize excessive compliance and monitoring costs that may adversely affect profitability while still providing adequate protection against operational and financial risks.
3. Boards of directors should regularly review and update internal control policies to ensure that they remain effective in addressing emerging business risks and changes in the operating environment.
4. Regulatory authorities should encourage firms to adopt internationally accepted internal control frameworks and provide periodic training on effective risk management and corporate governance practices.

Contribution to Knowledge

This study contributes to the existing body of knowledge in several important ways.

First, the study provides recent empirical evidence on the effect of internal control systems and financial performance of listed construction and real estate companies in Nigeria using data covering the period from 2021 to 2025.

Second, unlike many previous studies that focused on only one measure of financial performance, this study simultaneously employed Return on Assets (ROA) and Return on Equity (ROE), thereby providing a broader assessment of firms' financial performance.

Third, the study separately examined effects of Control Environment and Risk Assessment on financial performance, making it possible to determine the individual contribution of each internal control component to organizational performance.

Finally, the findings provide useful information for corporate managers, investors, regulators, and policymakers by demonstrating that although a strong control environment contributes positively to organizational performance, effective risk assessment should be carefully managed to avoid unnecessary costs that may reduce profitability in the short run.

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