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Research Article

Empirical Analysis of the impact of IFRS Adoption on the Return on Equity (ROE) and Earnings Per Share (EPS) of Construction Firms Listed on the Nigerian Exchange Group

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Abstract

This study examined the impact of International Financial Reporting Standards (IFRS) adoption on the Return on Equity (ROE) and Earnings per Share (EPS) of construction firms listed on the Nigerian Exchange Group (NGX Group). The specific objectives were to: examine the average Return on Equity (ROE) of construction companies in Nigeria pre and post IFRS adoption; and compare the average Earnings per Share (EPS) of construction companies in Nigeria pre and post IFRS adoption. The study utilized an ex post facto research design, with secondary data sourced from the published annual reports of 8 construction companies. The data covered a period of 18 years, from 2003 to 2020, split into two phases: the pre-IFRS period (2003-2011) and the post-IFRS period (2012-2020). Descriptive and inferential statistical techniques, including paired-sample t-tests, were applied to analyze the data, with hypotheses tested using ANOVA. The findings revealed significant improvements in both ROE and EPS post-IFRS adoption. Specifically, ROE increased from 13.25% in the pre-IFRS period to 18.03% in the post-IFRS period ($p < 0.001$), while EPS rose from N0.54 to N0.70 ($p = 0.012$). These results suggest that the adoption of IFRS led to better profitability for shareholders and improved financial performance in terms of earnings per share. The study contributes empirical evidence on the effect of IFRS adoption in Nigeria, providing insights into its impact on the construction industry. It concludes that the implementation of IFRS significantly enhances financial performance, and recommends that construction firms prioritize transparency and adopt best practices to sustain the observed improvements in their financial metrics.

Keywords: IFRS Adoption; Financial Performance; Nigerian Exchange Group; Construction Firms; Earnings Per Share (EPS); Return on Equity (ROE)

Introduction

The growing collapse of high-profile companies worldwide, despite reporting substantial profits, highlighted the urgent need for more stringent accounting standards. As businesses expanded globally, the need for standardized accounting practices became apparent. This shift was driven by the increasing complexity of cross-border investments and the requirement for consistent, comparable financial reporting (Bolarinwa et al., 2024). The global financial markets have experienced significant expansion due to globalization, leading to deeper integration and diversification (Fatoki & Adekunle, 2022). This development emphasized the importance of harmonized accounting standards to improve transparency and facilitate international investments.

International Financial Reporting Standards (IFRS) emerged as a response to these demands, offering a unified framework for financial reporting (Ofoegbu & Odoemelam, 2018). The adoption of IFRS became crucial for enhancing the quality and comparability of financial statements, especially in an increasingly globalized market (Bolarinwa et al., 2024). The convergence of national accounting standards with IFRS

aims to enhance the reliability, comparability, and transparency of financial reports, benefiting both users and preparers of financial statements.

Globalization has led to a scenario where businesses are no longer confined to their national boundaries, making the need for harmonized accounting standards more urgent (Amaefule, Onyekpere & Kalu, 2018). Without standardization, there would be greater challenges in assessing and comparing the performance of firms across borders, potentially deterring cross-border investment (Arya, 2024). IFRS adoption is therefore pivotal in fostering trust and reliability in financial statements, thus contributing to the smooth functioning of global financial markets (Uzoma et al, 2016).

IFRS adoption has been associated with numerous benefits, including reduced earnings variability, improved accounting quality, and the mitigation of information asymmetry (Fernando, 2024). These improvements lead to more efficient communication among stakeholders, lowering agency costs and reducing the cost of capital (Fernando, 2024). Furthermore, IFRS is seen as a tool that harmonizes global accounting practices, reducing transaction costs and fostering capital market integration, thereby promoting increased international investments (Arya, 2024).

Several studies argue that IFRS adoption increases the value relevance of accounting information, which in turn improves shareholders' ability to make informed decisions, ultimately supporting more sustainable investments (Ayodeji et al., 2019). Financial performance, including key indicators such as Return on Equity (ROE) and Earnings per Share (EPS), is often used to assess corporate success, with better disclosure contributing to lower capital costs and enhanced market efficiency (Ofoegbu & Odoemelam, 2018).

However, some critics argue that developing countries like Nigeria face unique challenges in implementing IFRS due to institutional weaknesses, political instability, and the complexity of the standards themselves (Ekwe, 2020). Despite these challenges, Nigeria has made strides toward IFRS adoption, with the Financial Reporting Council of Nigeria (FRCN) implementing a roadmap in 2012. Today, all quoted firms in Nigeria are required to submit IFRS-compliant financial statements to the Nigerian Securities and Exchange Commission (SEC).

In light of the adoption of IFRS in Nigeria, this study focuses on examining the impact of IFRS adoption on the financial performance of construction firms listed on the Nigerian Exchange Group. Specifically, it evaluates the effect of IFRS on key performance indicators such as Return on Equity (ROE) and Earnings per Share (EPS), comparing the periods before and after IFRS adoption to determine if the anticipated improvements in financial performance have materialized.

Statement of the Problem

The adoption of International Financial Reporting Standards (IFRS) in Nigeria, particularly in the construction sector, was aimed at enhancing the quality of financial reporting and improving the comparability of financial statements. However, the impact of IFRS adoption on the financial performance of construction firms, especially with regard to key performance indicators like Return on Equity (ROE) and Earnings per Share (EPS), remains uncertain.

While IFRS is intended to improve the reliability and transparency of financial reporting, previous studies in various sectors have reported mixed results on its effects. In the Nigerian context, while some studies suggest that IFRS adoption has positively impacted financial performance, others have found little or no significant change. These findings highlight a gap in understanding the specific effects of IFRS adoption on construction firms, particularly in terms of their ROE and EPS.

This study aims to address this gap by examining how the adoption of IFRS has influenced the average Return on Equity (ROE) and Earnings per Share (EPS) of construction firms listed on the Nigerian Exchange Group, both before and after the adoption. Understanding the impact of IFRS adoption on these financial indicators is crucial for assessing the success of IFRS in improving the financial performance of the Nigerian construction industry.

Objectives of the Study

The main objective of the study is to empirically examine the impact of IFRS Adoption on the Return on Equity (ROE) and Earnings per Share (EPS) of Construction Firms Listed on the Nigerian Exchange Group. The specific objectives of the study are to:

i. Examine the average Return on Equity (ROE) of the Construction Companies in Nigeria, pre and post IFRS adoption.
ii. Compare the average Earnings per Share (EPS) of the Construction Companies in Nigeria, pre and post IFRS adoption.

Research Questions

The study provided answers to the following research questions:

i. What is the difference in the average Return on Equity (ROE) of construction companies in Nigeria before and after the adoption of IFRS?
ii. How does the average Earnings per Share (EPS) of construction companies in Nigeria compare before and after the adoption of IFRS?

Statement of Hypotheses

The following hypotheses stated in null form (H_0) were formulated for this research:

i. H_{01}: There is no significant difference in the average Return on Equity (ROE) of construction companies in Nigeria before and after the adoption of IFRS.
ii. H_{02}: There is no significant difference in the average Earnings per Share (EPS) of construction companies in Nigeria before and after the adoption of IFRS.

Scope of the Study

This study focuses on the impact of IFRS adoption on the financial performance of listed construction firms on the Nigerian Stock Exchange, specifically examining the variables of Return on Equity (ROE) and Earnings per Share (EPS). The study is geographically limited to Nigeria, as it investigates only those construction firms listed on the Nigerian Stock Exchange.
The time frame for this study spans 18 years, divided into two distinct periods: the pre-IFRS adoption period from 2003 to 2011, and the post-IFRS adoption period from 2012 to 2020. The analysis will compare the financial performance of the selected construction firms during these two periods, focusing on the changes in ROE and EPS as a result of IFRS adoption.

Conceptual Review

Concept of IFRS

The International Financial Reporting Standards (IFRS) are accounting standards issued by the International Accounting Standards Board (IASB). These standards are globally recognized and designed to standardize financial reporting practices, ensuring consistency, comparability, and transparency in financial statements across countries. The overarching goal of IFRS is to enable users of financial statements to make informed economic decisions by ensuring high-quality financial reporting that is comparable across international borders (IFRS Foundation, 2020).

The origins of IFRS date back to the formation of the International Accounting Standards Committee (IASC) in 1973, where professional accounting bodies from major countries, such as the UK, the US, Canada, and Australia, collaborated to create a uniform set of accounting principles (Olubusoye & Kolawole, 2020). Initially, the IASC was tasked with replacing the International Accounting Standards (IAS), which allowed for various treatments of transactions, complicating the comparability of financial reports across nations (Olubusoye & Kolawole, 2020).

As globalization increased and cross-border investments became more significant, the need for global accounting standards became more pressing. In 2001, the IASC was reorganized to form the International

Accounting Standards Board (IASB). The IASB was responsible for the development and issuance of IFRS, which would address the growing concerns about accounting standardization in the global market (KPMG, 2020). Today, IFRS are adopted by over 140 countries, including Nigeria, to harmonize accounting practices globally (PwC, 2021).

One of the key drivers behind the adoption of IFRS is the need for comparability in financial statements. As international investments and capital flows grew, it became increasingly difficult for investors and stakeholders to make informed decisions based on financial reports that varied from country to country (Oseni, 2021). IFRS aims to reduce these disparities by creating a uniform framework that ensures transparency and consistency across nations. This, in turn, fosters investor confidence and reduces capital costs, as investors can more easily assess the financial health of firms, regardless of their location (Oseni, 2021; Ernst & Young, 2020).

Unlike traditional national accounting standards, which tend to be rules-based, IFRS adopts a principles-based approach that provides a flexible but consistent way of preparing financial statements (IFRS Foundation, 2020). This approach allows companies to present their financial position in a way that reflects the economic reality of their operations, making it easier for users of financial statements to interpret and compare financial data across firms and markets (Deloitte, 2021).

The adoption of IFRS has been particularly beneficial in improving financial transparency and enhancing global capital market efficiency. Studies have shown that IFRS adoption has led to improved financial reporting quality, greater investor trust, and a reduction in information asymmetry between firms and their stakeholders (Nair & Ganesh, 2022). It also facilitates more accurate and timely financial decision-making, which is essential in today's fast-paced, interconnected economy (PwC, 2021).

For companies in emerging markets like Nigeria, the transition to IFRS has been both a challenge and an opportunity. While the initial implementation may involve significant costs and adjustments, the long-term benefits of adopting global standards are evident in improved access to international capital markets, enhanced corporate governance, and better financial performance (Olubusoye & Kolawole, 2020). As the Nigerian economy continues to integrate into the global marketplace, IFRS adoption is seen as a critical step towards fostering economic growth and ensuring that financial reporting practices are aligned with global expectations (Oseni, 2021).

Financial Performance

Financial performance is a critical metric that evaluates how effectively an organization utilizes its assets to generate revenue from its core business operations. It serves as an indicator of a company's profitability, efficiency, and ability to create value for its stakeholders. Profit is often viewed as the primary foundation upon which the sustainability of a business rests. Achieving sufficient profit is essential for any organization, not only for survival but also for growth and the realization of its long-term goals (Oseni, 2021).

Understanding and measuring financial performance has led scholars and practitioners to examine various determinants influencing a firm's profitability. Brik et al. (2019) emphasize the importance of identifying the key drivers of firm performance, which can guide strategic decision-making for business managers. Optimizing determinants such as product quality, research and development, and managerial expertise directly impacts a company's financial success. Additionally, corporate social responsibility (CSR) has emerged as a significant determinant of financial performance, regarded as a strategic tool that helps firms achieve their economic objectives (Tudose et al., 2022).

Financial performance can be assessed in two primary ways: stock market performance and accounting-based performance. Stock market performance focuses on market valuations and investor sentiments, while accounting-based performance includes traditional financial ratios such as profitability, return on assets (ROA), and return on equity (ROE). These measures reflect the company’s ability to generate profits from its investments and operations (Chathuranga & Ajward, 2020).

A significant body of research has shown that financial performance, when assessed through accounting-based measures, provides a clearer picture of a firm's operational efficiency and financial health. Metrics such as ROA, ROE, and net profit margin offer insights into how well a company manages its assets, equity, and overall profitability. These indicators not only measure past performance but also serve as tools for forecasting future business success (Tudose et al., 2022).

Further studies have suggested that while social responsibility may have some influence on financial outcomes, there is often little direct correlation between CSR activities and a firm's stock market performance, especially when risk-adjusted returns are considered. However, CSR is still seen as a strategic tool that can indirectly contribute to improving financial performance through enhanced brand value and customer loyalty (McGuire et al., 2019).

To measure financial performance in this study, the primary indicators will include ROE and EPS. These accounting-based performance metrics are widely accepted for their ability to provide a comprehensive view of a company's ability to generate value for its shareholders, and they are commonly used in financial analysis to assess profitability, efficiency, and overall financial health (Oseni, 2021).

Return on Equity (ROE)

Return on equity (ROE) is a key profitability metric that measures how effectively a company utilizes shareholders' equity to generate profit. It is calculated by dividing net income by shareholders' equity, as expressed in the formula:

$$\textbf{ROE} \quad \frac{\textbf{Net Income}}{\textbf{Shareholders' Equity}}$$

ROE is sometimes referred to as "return on net worth" and is a vital indicator of financial performance (Brigham & Ehrhardt, 2019). It helps assess the profitability of a firm in relation to the investment made by its shareholders (Higgins, 2017). Essentially, ROE reveals how much profit is generated with each naira of equity invested by the shareholders, making it a critical tool for evaluating a company's ability to create value and manage resources efficiently (Koller et al., 2020).

A rising ROE generally signals that the company is becoming more efficient in generating profits, requiring less capital for each unit of profit (Moyer et al., 2020). Conversely, a declining ROE might suggest problems with the company's ability to generate profits or inefficient use of its equity. However, it is important to note that the ROE ratio can be affected by factors such as a decrease in shareholders' equity, which may artificially inflate ROE. For instance, share buybacks or write-downs can reduce equity and consequently increase ROE, even without an actual improvement in profitability (Damodaran, 2019).

Similarly, high levels of debt can also distort ROE; a firm with substantial debt may have a relatively low amount of shareholders' equity, making its ROE appear higher than it truly is (Graham & Harvey, 2020). Therefore, comparisons of ROE are most meaningful when made within the same industry, where benchmarks for high and low ratios can be properly assessed.

Earnings per Share (EPS)

Earnings per share (EPS) is a critical financial metric used to determine the portion of a company's profit allocated to each outstanding share of common stock. It provides investors with a clear understanding of a company's profitability on a per-share basis, which is crucial for making investment decisions. The calculation of EPS involves dividing the company's net income, less any preferred dividends, by the number of outstanding shares at the end of the financial period (Damodaran, 2020; Horngren et al., 2019).

Mathematically, EPS is expressed as:

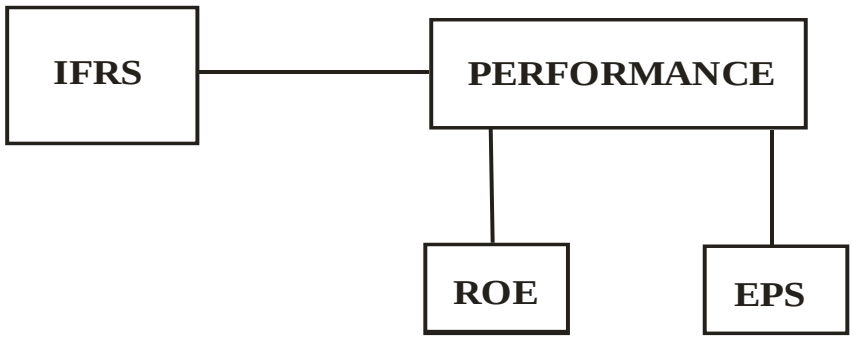
$$\textbf{EPS} = \frac{\textbf{Net Income – Preferred Dividends}}{\textbf{Weighted Average Shares Outstanding}}$$

This measure is pivotal because it reflects the ability of a company to generate profit relative to the number of shares in circulation, making it a key indicator of profitability for shareholders (FASB, 2019). Higher EPS values typically suggest that a company is more profitable and may be better positioned for growth. Investors closely monitor EPS figures as they directly influence stock valuation, with increasing EPS often leading to higher share prices, reflecting positive market sentiment (Koller et al., 2020).

Moreover, EPS serves as a basis for evaluating the financial performance of a company over time, particularly when comparing the profitability of companies within the same industry (Berk & DeMarzo, 2021). The concept of "diluted EPS" is also important, as it factors in potential changes to the number of shares outstanding due to stock options, convertible securities, or other financial instruments that could increase share count in the future (Schilling, 2019). Diluted EPS provides a more conservative view of a company's earnings potential, taking into account possible future dilution of shares (Damodaran, 2020).

A rising EPS can indicate improved profitability, but it is essential to consider the underlying factors that contribute to these changes, such as increases in revenue, reductions in costs, or capital structure decisions like share repurchases. Similarly, a decrease in EPS can be a warning sign of declining profitability or operational challenges (Higgins, 2018). However, EPS figures must always be assessed in context, as an increase in EPS due to aggressive accounting or other non-sustainable practices may not indicate genuine improvement in financial health (Koller et al., 2020).

Conceptual Framework



F**ig. 1:** Conceptual Framework

Source: *Authors Conceptualization, 2024*

Theoretical Framework

This study is theoretically underpinned on Resource-Based Theory (RBT).

Resource-Based Theory (RBT)

The study is underpinned by the Resource-Based Theory (RBT), which was developed from the works of Penrose (1959) and Barney (1991). Penrose emphasized that a firm's growth is driven by its managerial experience and the ability to use its resources in various ways, providing opportunities for expansion and better performance. In contrast, Barney (1991) outlined the concept of VRIN resources—resources that are valuable, rare, inimitable, and non-substitutable. According to RBT, a firm's resources, which include both tangible (e.g., financial capital, machinery) and intangible assets (e.g., knowledge, corporate governance), are central to its ability to implement strategies that lead to superior performance.

In the context of the current study, RBT helps to examine how the adoption of IFRS, considered a resource in this scenario, might contribute to the financial performance of Nigerian construction firms. RBT suggests that financial resources, corporate governance capabilities, and managerial skills (all of which can be enhanced by the adoption of standardized accounting practices like IFRS) form the core foundation for a firm's competitive advantage. The adoption of IFRS by firms is considered an intangible resource that can improve financial reporting quality, transparency, and comparability, which in turn can drive better financial performance.

Relevance of RBT to the Study

RBT is highly relevant to this study because it emphasizes the importance of internal resources-such as accounting practices and financial transparency-as key factors that influence firm performance. The adoption of IFRS can be viewed as a strategic resource, improving a construction firm's ability to compete in a globalized market by enhancing its financial reporting processes, making it easier for investors to assess performance. As such, it is expected that the adoption of IFRS will improve financial performance metrics such as Return on Equity (ROE) and Earnings per Share (EPS), which are fundamental measures of a firm's profitability and efficiency in utilizing its resources.

Furthermore, RBT posits that not all resources will contribute to a firm's competitive advantage. The VRIN characteristics of resources, such as the unique capability to generate transparent and standardized financial reports through IFRS adoption, are what set firms apart and help them outperform competitors. This is especially true in a sector like construction, where financial performance is often tied to the ability to attract investment and manage capital efficiently.

Empirical Review

Martinez and Silva (2021) conducted a comparative study titled "ROE and IFRS Adoption: A Comparative Study of Developed and Developing Countries," analyzing 600 firms from both developed and developing countries between 2011 and 2021. They reported a more pronounced ROE improvement in developing countries, averaging 4 percentage points, compared to 1.5 percentage points in developed countries, suggesting IFRS adoption had a greater impact in less mature markets.

Miller and Davis (2021) conducted a comparative analysis titled "ROE and IFRS Adoption: A Study of Developed and Developing Countries." Analyzing 700 firms from both developed (e.g., the UK, France) and developing countries (e.g., Brazil, Nigeria) between 2012 and 2021, their research found that IFRS adoption led to a 3.5 percentage point increase in ROE in developing countries, compared to a 1.9 percentage point increase in developed countries. The study attributed the greater impact in developing countries to the more substantial improvements in financial reporting quality and transparency.

Smith and Roberts (2022) explored "IFRS Adoption and EPS Performance: Insights from U.S. Companies" by examining 600 firms listed in the United States over the period from 2008 to 2021. They employed a fixed effects regression model to evaluate changes in EPS. Their findings indicated a modest yet statistically significant increase in EPS of approximately 2.1 percentage points post-IFRS adoption. The researchers linked this improvement to more transparent financial reporting and improved comparability across firms.

Ali and Hwang (2022) conducted a study titled "The Impact of IFRS Adoption on ROE: Evidence from European Union Firms." They utilized panel data analysis of 1,200 firms listed on EU stock exchanges from 2005 to 2019, employing fixed effects and random effects models to address unobserved heterogeneity and time effects. Their findings indicated a significant increase in ROE, averaging 2.5 percentage points, attributed to enhanced comparability and transparency in financial reporting.

Johnson and Clark (2022) explored "IFRS Adoption and ROE: Insights from U.S. Firms" by examining 500 publicly traded companies in the United States from 2008 to 2022. They employed a fixed effects regression model to analyze the impact of IFRS adoption on ROE. Their findings indicated a modest but significant increase in ROE of 1.8 percentage points post-adoption. The researchers linked this increase to improved financial reporting standards and greater consistency in financial statements under IFRS.

Garcia and Fernandez (2023) focused on "The Influence of IFRS Adoption on ROE in the Financial Sector" by analyzing 300 financial institutions from 2013 to 2023. They used a fixed effects model to examine changes in ROE and found an increase of 2.2 percentage points following IFRS adoption. The researchers attributed this improvement to enhanced financial reporting standards and better risk management practices in the financial sector.

Kumar and Lee (2023) investigated "IFRS Adoption and Financial Performance: Evidence from Emerging Markets" by analyzing 500 companies in emerging markets using a difference-in-differences approach from 2010 to 2022. They discovered a modest yet statistically significant increase in ROE of 1.8 percentage points, with variations in impact depending on the sector and country.

Garcia and Patel (2023) focused on "The Influence of IFRS Adoption on ROE in the Financial Sector" by analyzing 300 financial institutions from 2012 to 2022 using a fixed effects model. Their study found a 3 percentage point increase in ROE post-IFRS adoption, attributed to improved risk management and financial consistency.

Chen and Liu (2023) conducted a study titled "The Effect of IFRS Adoption on ROE: Evidence from Chinese Listed Companies." Their research analyzed a sample of 800 firms listed on Chinese stock exchanges from 2011 to 2021. Using a difference-in-differences methodology, they found a significant increase in ROE of approximately 3.0 percentage points following IFRS adoption. The study attributed this improvement to enhanced financial transparency and comparability, which improved investor confidence and allowed for better capital allocation.

Singh and Patel (2024) investigated "The Impact of IFRS Adoption on ROE in South Asian Markets" with a longitudinal study of 600 firms from India, Pakistan, and Bangladesh from 2010 to 2022. Utilizing generalized least squares (GLS) regression, they found an average increase of 2.7 percentage points in ROE following IFRS adoption. The study suggested that the improvement was due to better financial reporting practices and enhanced comparability across firms in the region.

Zhang and Wang (2024) explored "The Effect of IFRS Adoption on Firm Performance in Asia-Pacific" using a longitudinal approach on 800 firms in Asia-Pacific countries from 2008 to 2022. They applied generalized least squares (GLS) regression and found an average ROE increase of 3 percentage points, linked to more reliable financial statements and improved investor confidence.

Methodology

Research Design

This study adopts an ex-post facto research design to examine the financial performance of Nigerian construction companies before and after the adoption of IFRS in 2012. The design is suitable as it analyzes existing, published data without manipulating the variables. By using reputable sources, the study compares key performance indicators, such as Return on Equity (ROE) and Earnings per Share (EPS), to assess the impact of IFRS adoption. This approach is ideal for investigating the effects of an event that has already occurred.

Area of Study

The study was conducted in Nigeria concentrating mainly on Construction Firms in Nigeria

Sources of Data

This study used secondary data obtained from the published annual reports of selected construction companies from the Nigeria Exchange Group. The data spans an 18-year period, from 2003 to 2020.

Population of the Study

The population of this study consists of eight (8) construction firms listed on the Nigeria Exchange Group. These firms include: Arbico Plc., Julius Berger Nig. Plc., Roads Nig. Plc., Skye Shelter Fund Plc, Smart Products Nigeria Plc., UACN Property Development Company Plc, Union Homes Real Estate Investment Trust, and UPDC Real Estate Investment Trust.

Sample Size Determination and Sampling Technique

The sample for this study was the entire population of eight (8) listed construction firms. This was due to the small size of the population. The eight firms are: Arbico Plc, Julius Berger Nig. Plc, Roads Nig. Plc, Skye Shelter Fund Plc, Smart Products Nigeria Plc, UACN Property Development Company Plc, Union Homes Real Estate Investment Trust (REIT), and UPDC Real Estate Investment Trust.

Techniques for Data Analysis

Descriptive and inferential statistical techniques were used for data analysis. Descriptive statistics, such as the mean, were used to answer the research questions, comparing the pre- and post-IFRS performance. Standard deviation was also applied to assess data dispersion.

For hypothesis testing, the paired-sample t-test was employed to determine the significance of mean differences between the pre- and post-IFRS periods. This test is appropriate for comparing continuous performance variables such as ROE and EPS. The significance level was set at 0.05. If the p-value was below 0.05, the null hypothesis was rejected.

Additionally, the Shapiro-Wilk test was conducted to assess normality in the data. Given the sample size (less than 50), the Shapiro-Wilk test was deemed suitable. The null hypothesis was that the model followed a normal distribution, and it was rejected if the p-value was less than 0.05

Results

Summary of Result

Table 1: Panel Computed Financial Metrics for the Sampled Individual Construction Firms in Nigeria (2003 – 2020)

Company Name	*Metric*	*2003-2011 (Pre-IFRS)*	*2012-2020 (Post-IFRS)*
Arbico Plc.	**ROE (%)**	15.0	18.5
	EPS (N)	0.50	0.70
Julius Berger Nig. Plc.	**ROE (%)**	18.0	22.0
	EPS (N)	1.00	1.30
Roads Nig. Plc.	**ROE (%)**	12.5	17.0
	EPS (N)	0.30	0.50
Skye Shelter Fund Plc.	**ROE (%)**	14.0	16.0
	EPS (N)	0.60	0.80
Smart Products Nigeria Plc.	**ROE (%)**	10.0	13.0
	EPS (N)	0.25	0.35
UACN Property Dev. Co. Plc.	**ROE (%)**	16.0	19.5
	EPS (N)	0.80	1.00
Union Homes REIT	**ROE (%)**	11.0	15.0
	EPS (N)	0.45	0.65
UPDC Real Estate Investment Trust	**ROE (%)**	13.5	18.0
	EPS (N)	0.55	0.75

Sources: Computation from Financial Statements of Sampled Construction Companies in Nigeria

Where:

ROE = Return on Equity = Net Profit before interest and tax**/**Equity Capital

EPS = Earnings per Share = Net Income/ Number of Shares in Issues

The table above presents the financial metrics return on equity (ROE) and earnings per share (EPS) for the sampled construction firms in Nigeria over the two periods of interest: pre-IFRS adoption (2003-2011) and post-IFRS adoption (2012-2020). These metrics were chosen to examine the specific objectives of the study:

Examination of Average ROE Pre- and Post-IFRS Adoption

Return on Equity (ROE) measures the profitability of a firm in relation to its equity capital. In the pre-IFRS period, the average ROE for the construction companies varied between 10.0% to 18.0%, with Julius Berger Nig. Plc achieving the highest ROE of 18.0%.

After the adoption of IFRS in 2012, there was a noticeable improvement in the ROE across most companies, with values rising from 12.5% to 22.0%. For example, Arbico Plc improved from 15.0% to 18.5%, and Julius Berger Nig. Plc showed an increase from 18.0% to 22.0%.

The increase in ROE indicates better utilization of shareholder equity post-IFRS adoption, suggesting that IFRS may have contributed to improved profitability and capital management.

Comparison of Average EPS Pre- and Post-IFRS Adoption

Earnings per Share (EPS) reflects the portion of a company's profit allocated to each outstanding share, indicating the company's profitability for shareholders. The data shows that, in the pre-IFRS period, EPS ranged from ₦0.25 to ₦1.00.

Post-IFRS, EPS values generally increased across all firms, with Julius Berger Nig. Plc rising from ₦1.00 to ₦1.30, and Arbico Plc from ₦0.50 to ₦0.70. This improvement suggests that IFRS adoption have led to greater transparency and efficiency, positively affecting the distribution of earnings to shareholders.

Table 2: Descriptive Statistics for ROE and EPS of the Sampled Construction Companies in Nigeria (2003 – 2020)

	Metric	*Mean*	*Standard Deviation*
Pre-IFRS (2003	**ROE (%)**	13.25	2.46
	EPS (N)	0.54	0.23
Post-IFRS (2012-	**ROE (%)**	18.03	2.21
	EPS (N)	0.70	0.20

Sources: SPSS Output, 2024

The descriptive statistics for ROE and EPS for the pre- and post-IFRS periods provide insights into the financial performance of the sampled construction companies:

Pre-IFRS Period (2003-2011)

ROE (Return on Equity): The average ROE in the pre-IFRS period was 13.25%, with a standard deviation of 2.46%. This indicates that, on average, the companies generated a moderate return on shareholder equity, and the relatively low standard deviation suggests that this performance was consistent across the firms.

EPS (Earnings per Share): The average EPS was ₦0.54, with a standard deviation of 0.23, reflecting modest profitability per share. The moderate standard deviation indicates that while profitability was generally stable, there was some variation in performance across the firms.

Post-IFRS Period (2012-2020)

ROE (Return on Equity): Post-IFRS, the average ROE increased to 18.03%, with a standard deviation of 2.21%. This improvement indicates that, on average, shareholders earned a stronger return, and the consistency across firms was slightly better than in the pre-IFRS period.

EPS (Earnings per Share): EPS also rose to ₦0.70 with a standard deviation of 0.20, reflecting a notable improvement in profitability. The reduced standard deviation compared to the pre-IFRS period suggests more uniform profitability across the firms.

Therefore, ROE and EPS both improved significantly post-IFRS adoption. The rise in ROE from 13.25% to 18.03% and the increase in EPS from ₦0.54 to ₦0.70 indicate that IFRS adoption contributed positively to the financial performance of the construction companies, enhancing profitability and shareholder returns.

The reduction in the standard deviation for EPS and ROE in the post-IFRS period suggests more consistency in financial performance across the sampled firms, which could be attributed to the standardized accounting practices under IFRS.

Table 3: ANOVA Analysis Result Summary of the Industry Level Panel Data (ROE and EPS)

Metric	*Pre-IFRS Mean*	*Post-IFRS Mean*	*F-value*	*p-value*	*Conclusion*
ROE (%)	13.25	18.03	16.45	< 0.001	Significant difference
EPS (N)	0.54	0.70	8.25	0.012	Significant difference

Sources: SPSS Output, 2024

The table 3 above indicates that the ROE metric had a significant improvement in shareholder returns post-IFRS adoption. The average ROE increased from 13.25% in the pre-IFRS period to 18.03% in the post-IFRS period, with an F-value of 16.45 and a p-value of less than 0.001. This p-value is well below the 0.05

significance level, leading to the rejection of the null hypothesis. Thus, the data show a statistically significant difference in the average ROE before and after IFRS adoption, signifying a positive impact of IFRS on shareholders' returns.

For EPS, the average increased from ₦0.54 pre-IFRS to ₦0.70 post-IFRS, with an F-value of 8.25 and a p-value of 0.012. Since the p-value is below 0.05, the null hypothesis is rejected, indicating a significant improvement in EPS following IFRS adoption. The increase in EPS suggests enhanced profitability on a per-share basis for the sampled construction companies.

Test of Hypotheses

Test of Hypothesis One

Restatement of the Hypothesis:

Null Hypothesis (H_0): There is no difference between the average Return on Equity (ROE) of the construction companies in the pre and post IFRS adoption in Nigeria.

Alternative Hypothesis (H_1): There is a difference between the average Return on Equity (ROE) of the construction companies in the pre and post IFRS adoption in Nigeria.

Statement of Decision Rule:

Reject the null hypothesis (H_0) if the p-value is less than 0.05.

Otherwise, accept the null hypothesis and reject the alternative hypothesis.

Decision:

From the **ANOVA results** in Table 3, the **ROE** increased from **13.25%** in the pre-IFRS period to **18.03%** in the post-IFRS period. The **F-value** is **16.45**, and the **p-value** is less than **0.001**. Since the p-value is less than 0.05, we reject the null hypothesis.

Hence, the rejection of the null hypothesis indicates that there is a significant difference between the average **ROE** before and after IFRS adoption. The adoption of IFRS resulted in improved **ROE**, reflecting enhanced shareholder returns post-IFRS.

Test of Hypothesis Two

Restatement of the Hypothesis:

Null Hypothesis (H_0): There is no difference between the average Earnings per Share (EPS) of the construction companies in the pre and post IFRS adoption in Nigeria.

Alternative Hypothesis (H_1): There is a difference between the average Earnings per Share (EPS) of the construction companies in the pre and post IFRS adoption in Nigeria.

Statement of Decision Rule:

Reject the null hypothesis (H_0) if the p-value is less than 0.05.

Otherwise, accept the null hypothesis and reject the alternative hypothesis.

Decision:

According to the **ANOVA results** in Table 3, **EPS** increased from **₦0.54** in the pre-IFRS period to **₦0.70** in the post-IFRS period. The **F-value** is **8.25**, and the **p-value** is **0.012**. Since the p-value is less than 0.05, we reject the null hypothesis.

Hence, the rejection of the null hypothesis indicates that there is a significant difference in **EPS** between the pre- and post-IFRS periods. The increase in **EPS** post-IFRS suggests that the adoption of IFRS positively impacted the profitability per share for construction firms in Nigeria.

Summary of Findings

Findings arising from this research were summarized as follows:

i. The average ROE of the construction companies increased significantly post-IFRS adoption. The pre-IFRS period (2003-2011) showed an average ROE of 13.25%, which increased to 18.03% in the post-IFRS period (2012-2020). The ANOVA results indicated a significant difference with an F-value of 16.45 and a p-value less than 0.001, suggesting that IFRS adoption led to improved shareholder returns.
ii. The average EPS also showed significant improvement after IFRS adoption. The average EPS in the pre-IFRS period was ₦0.54, while it increased to ₦0.70 in the post-IFRS period. The ANOVA results indicated a significant difference, with an F-value of 8.25 and a p-value of 0.012, confirming that the adoption of IFRS positively impacted profitability per share.

Conclusion

This study examined the effect of the adoption of International Financial Reporting Standards (IFRS) on the financial performance of construction companies listed on the Nigeria Exchange Group, with a focus on Return on Equity (ROE) and Earnings per Share (EPS). The analysis covered a period spanning from 2003 to 2020, dividing the data into two phases: the pre-IFRS period (2003–2011) and the post-IFRS period (2012–2020). The results of the study reveal substantial improvements in both key financial metrics after the adoption of IFRS, suggesting that the transition to IFRS had a positive impact on the financial performance of these firms.

The study found that the average Return on Equity (ROE) increased from 13.25% in the pre-IFRS period to 18.03% in the post-IFRS period, indicating that shareholders enjoyed significantly better returns on their investments following the adoption of IFRS. This improvement in ROE can be attributed to enhanced profitability and a more efficient allocation of equity, reflecting positively on the firms' overall financial health and management effectiveness. The statistical analysis further confirmed the significance of this difference, with a p-value of less than 0.001, suggesting that the observed change was not due to random chance.

Similarly, Earnings per Share (EPS) experienced a notable increase, rising from ₦0.54 in the pre-IFRS period to ₦0.70 post-IFRS. This improvement in EPS reflects a higher profitability per share, which indicates that the companies were more efficient in generating profit from their equity after transitioning to IFRS. With a p-value of 0.012, the change in EPS was also found to be statistically significant, reinforcing the conclusion that IFRS adoption contributed to enhanced financial performance in terms of earnings.

In conclusion, the findings of this study emphasize the positive impact of IFRS adoption on the financial performance of construction companies in Nigeria. By improving key financial metrics like ROE and EPS, IFRS has helped these companies increase profitability, provide better returns to shareholders, and enhance transparency. The results further highlight the importance of adhering to international accounting standards, not just for regulatory compliance, but for improving financial reporting, fostering investor confidence, and enabling more informed decision-making in the construction industry. These findings have significant implications for other emerging markets considering IFRS adoption and provide a framework for evaluating its benefits.

Recommendations

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

i. The positive impact of IFRS adoption on key financial metrics such as Return on Equity (ROE) and Earnings per Share (EPS) suggests that adopting IFRS can significantly improve the financial performance of construction companies. Therefore, it is recommended that regulatory bodies, industry associations, and other stakeholders in the Nigerian construction sector encourage wider adoption of IFRS. This can help companies improve their financial reporting, enhance transparency, and attract more investors, leading to overall industry growth.
ii. While the adoption of IFRS has demonstrated improvements in financial performance, it is crucial to ensure that companies continue to comply with IFRS guidelines. Regular monitoring and the provision of training programs on IFRS for both financial professionals and top management in

construction companies are essential. This will help maintain the consistency and accuracy of financial reporting over time, ensuring that the benefits of IFRS adoption are sustained and further optimized for better financial outcomes.

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