

## **EFFECT OF EARNINGS QUALITY ON PROFITABILITY OF LISTED SERVICE COMPANIES ON THE NIGERIAN EXCHANGE GROUP**

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### **ABSTRACT**

The need for the current study is borne by the ever-evolving business and finance landscape. As the corporate landscape continues to evolve, maintaining high earnings quality remains a critical issue for companies seeking sustainable profitability and long-term success. This is why the study examines the effect of earnings quality on profitability of listed service companies on the Nigerian Exchange Group. The study adopts the ex-post facto research design. The population for the study consists of the 23 listed service companies. Using a judgmental sampling technique, the study selected 11 listed service companies. The multivariate regression technique is used to analyze data gotten from the financial statements of the companies for a period of 8 years (2015 to 2022). The study findings reveal that, earnings response coefficient as a proxy for earnings quality has no significant effect on return on asset, return on equity, and return on capital employed of the companies. Thus, it is recommended that, listed service companies in Nigeria should put in place earnings response mechanisms like prompt earnings announcement and more explanatory notes to enable more value relevant reporting that can spur investment financing by investors. This will attract more external financing that will make available funds for more profitable investment.

*Keywords:* Earnings response coefficient, profitability, and the signaling theory.

### **INTRODUCTION**

Reporting about the earnings of firms is the foundation of corporate transparency and governance in today's dynamic and linked global economy, giving stakeholders vital information about a company's performance, financial health, and future prospects (Rathnayake et al. 2021). An important factor in determining trust and confidence among investors, regulators, and other market participants is the quality of earnings announced. The importance of earnings announcement for businesses looking to attract investors, increase profitability, and maintain growth cannot be emphasized. As noted by Adeyemi and Asaolu (2013), The decision-making process is one of the most obvious relationships between the accuracy of financial reporting and the profitability of the firm. Before committing capital, lenders, investors, and other stakeholders

largely rely on financial statements to evaluate a company's performance and potential hazards (Lambert et al. 2007). When decision-makers have access to precise and trustworthy reports about the earnings of a firm, they may make better decisions on investments, acquisitions, and other financial actions.

On the other hand, poor reporting may result in suboptimal choices based on inaccurate or insufficient data, affecting profitability and value generation. It is also important to keep in mind that a company's reputation in the financial markets is influenced by the quality of its earnings reported. A company that continuously offers value relevant earnings announcement, attracts more investors and has lower cost of capital. As a result, there may be more opportunities for finance, better borrowing conditions, and more financial flexibility, which could ultimately lead to more profitable investments and expansions. According to Chen et al. (2011) firms with sound earnings announcement policies frequently have lower borrowing costs because of elevated market confidence. Their study sheds light on the idea that when they perceive fewer risk in the form of clear and dependable financial reporting, investors are unwilling to accept lower returns on their investments.

Rathnayake *et al.*, (2021) further noted that, the world of business and finance is always changing. As a result, earnings quality and profitability are hot topics in today's business environment. The quality of the company's earnings reported has been under a lot of public scrutiny as a result of scandals like WorldCom, Enron, and A-hold. This is due to the damage that these companies' subpar financial reporting caused investors during the financial crisis. In a speech he gave in 1998, Arthur Levitt, the chairman of the SEC in the USA, was quoted as talking about "the numbers game" and criticizing management practices such as "big bath" restructuring charges, untimely revenue recognition, "cookie-jar" reserves, and unfair "write-offs" of purchased in-process R&D" (Choi & Pae, 2011). The integrity of reported earnings is threatened by these management tactics, according to Levitt, thus investors, businesses, and other stakeholders must constantly evaluate how well a company's reported earnings compares to its profitability.

There is also a broad consensus among professionals, scholars, investors, regulators, and other stakeholders regarding the importance of rules governing the announcement of earnings by public companies and how that influences investors shares patronage (Kothari et al. 2005; Adeyemi & Asaolu, 2013). Though, there is a strong debate on whether the quality of earnings has been improving for last few years and about the consistency and predictability of firms earnings in Nigeria (Babatunde, 2019). Studies such as Basu (1997), Choi and Pae (2011), and Uwuigbe et al. (2016) have examine the statistical association earnings quality and the probable outcomes of these quality information proxies on financial performance of companies, yet the outcome is mixed. Also, after the adoption of IFRSs still there is a room for manipulating the earnings or accounting figures, thus, there is need for more contemporary research to examine these phenomena. To this end, the study's objective to examine the effect of earnings quality on profitability of listed service companies in Nigeria. The specific objectives are to assess the effect of earnings response on return on assets of listed service companies in Nigeria to analyze the effect of earning response on return on equity of listed service companies in Nigeria and to determine the effect of earning response on return on capital employed of listed service companies in Nigeria.

## LITERATURE REVIEW

### Earnings Quality

Because many economic decisions are dependent on the information gained from accounting information systems, accounting information systems play a crucial role in a firm's active flow and in complex economic decisions. For this reason, it is crucial to evaluate, maintain, and enhance financial reporting quality (FRQ). High-quality reporting and FRQ have a number of advantages, including lowering information and liquidity risk (Lambert et al. 2007), preventing management from using discretionary influence for their own interests, and assisting them in making wise investment decisions (Chen et al. 2011). According to Dechow and Dichev (2002), one of the major advantages of increased FRQ is its ability to minimize asymmetric information malfunctions brought on by competing agencies. Firms that report good quality financial information to the several markets agents enables them to perform in the market with superior conditions and upper level of information (Adeyemi & Asaolu, 2013).

The three characteristics of this phenomena that are most frequently used in texts to quantify FRQ are: (i) accounting conservatism; (ii) earning quality; and (iii) quality of accruals. Dechow and Dichev (2002) illustrate this idea by using earnings quality as a stand-in for FRQ. Higher earnings quality indicates elements of the firm's earnings process that are important to a given decision made by a specific decision-maker, according to their categorization of the proxy measures of earnings quality. Dechow and Dichev (2002) proposed the FRQ everlasting indicator, characteristic of earnings, and earnings response coefficients as substitutes for earnings quality. Earnings response refers to the level at which earnings announcement influence investors decision to buy or sell shares of a firm. These researchers identified business financial reporting procedures, auditors, governance and controls, capital market incentives, characteristics, institutional variables, and external factors as important earnings quality determinants. After the adoption of IFRSs, emphasis has been on cash basis of financial reporting than accrual basis thus, the effect of earnings quality in terms of earnings response coefficient and how it affects profitability of the companies is examined.

### Profitability

Profitability of companies are financial performance evaluation ratios which refers to the evaluation of a company's overall financial health and success over a specific period of time, by considering the profit to assets, equity, and capital. Profitability is crucial for businesses, investors, and stakeholders to assess how well a company is managing its financial resources and generating profits. Financial performance analysis is essential for stakeholders, including investors, creditors, and management, as it helps them make informed decisions about investing, lending, or managing the company (Martinez-Ferrero, 2014). A strong profitability performance generally suggests a well-managed and profitable company, while poor performance may suggest losses.

There are various measures of profitability. For example, return on assets (ROA) determines an organization's efficiency in the ability to make use of its assets and return on equity (ROE) reveal the return investors expect to earn on their equity and return on capital employed (ROCE) reveals how much a company earns in relation to the total capital employed (Both equity and debt). The

advantages of profitability as a financial performance measure is the simplicity of calculation and also that their definitions are agreed worldwide.

### **Signaling theory**

This study is anchored on the signaling theory. It was propounded by Michael Spence in 1973. Signaling theory states that corporate financial reports are signals sent by the company's managers to investors in order to reduce information asymmetries. Signaling theory is based on the assumption that information is not equally available to all parties at the same time, and that information asymmetry becomes the central issue thus quality financial reports are needed for investors to make financing decision capable of spurring businesses profitability. Through his research on markets with asymmetric information, Spence developed the theory of "signaling" to show how better-informed individuals in the market communicate their information to the less-well-informed to avoid the problems associated with adverse selection.

In Dechow and Dichev (2002) study, they equally argued that, asymmetric information or information failure is a derivative condition that arises mainly because of uncertainty and opportunism when two parties (individuals or organizations) to an economic transaction possess information disparity or have access to different information. Accordingly, Kothari (2005) posited that, in a multi-stakeholder setting, the joint presence of uncertainty, opportunism and bounded rationality is both inevitable and bound to lead to information impacts by which information is asymmetrically distributed between the parties (managers of the firms as providers of corporate reports) and various stakeholder groups (as consumers and users of corporate reports). This conditions are the basis upon which financial information and profitability scholars have held unto the notion that, the quality of financial reports produced by companies to an extent may affect their performance and profitability.

### **Empirical Review**

The study reviewed the following works on financial reporting quality and financial performance across the globe to gain insight into existing evidence. Regression analysis was used by Adeyemi and Asaolu (2013) to conduct an empirical study on financial reporting methods and bank stability in Nigeria. According to the research data, disclosures significantly increase the stability of Nigerian banks. While Uwuigbe et al. (2016) used descriptive statistics and the fixed effects panel data method of data analysis to analyze the value relevance of financial statements and share prices of listed banks in Nigeria. According to the study's findings, there is a strong positive correlation between last day earnings per share (LDEPS) and earnings per share (EPS). Saliu and Adetoso (2018) used Ordinary Least Square (OLS) regression analysis to examine the impact of financial reporting on the profitability of listed companies in Nigeria. The study's conclusions demonstrated a strong correlation between the quality of financial reporting and the profit after tax of Nigerian traded companies.

The impact of financial reporting quality on corporate performance in Nigeria was examined by Babatunde (2019). Earnings quality, accounting conservatism, and accruals quality were used as three proxy measures of financial reporting quality. Using panel regression, they discovered a substantial inverse association between Nigeria's financial reporting quality and levels of corruption, suggesting that the more corrupt a country is, the worse its financial reporting quality. Moreso, a significant positive relationship was found between IFRS and financial reporting quality.

In Sri Lankan listed companies, Rathnayake et al. (2021) investigated the effect of financial reporting quality on firm performance. They employed a quantitative technique and collected information from publicly available yearly financial statements of listed corporations. When return on assets, return on equity, and market to book ratio were regressed against financial reporting quality, their analysis found a generally significant link for all three tested models using the random effect model. However, there was no significant correlation between particular financial performance measures and the quality of financial reporting.

### METHODOLOGY

The study adopts ex-post facto research design. The population of this study comprises of the 23 listed service companies on the Nigerian Exchange Group. The study adopts the ordinary least regression (Multivariate model) in examination of the firm level data. 11 companies are selected using the purposive sampling method to form the sample size of the study. The companies are selected on the basis that, they are both listed on the Nigerian Exchange Group for the relevant years and the have complete financial records. The financial data of the companies are collected from published annual reports available on the Nigerian Exchange Group website. For the sake of this study, the following variables are defined:

**Earnings response:** This refers to perceived quality of earnings and reliance on reported earnings by investors in making investment decisions on the market. It is measured by calculating the changes in share price after earnings announcement. The study deducts the value of share price after earnings announcement to the share price value before earnings announcement in a year.

**Return on assets:** This refers to total of profit after tax divided by total asset of the company at a time.

**Return on equity:** This refers to total of profit after tax divided by total equity of the company at a time.

**Return on capital employed:** This refers to total of profit after tax divided by total capital of the company at a time.

**Control variable;**

Firm size is used as the control variable in this study. It is measured using the natural log of the companies' total assets for each year.

**Model specification**

This study models are specified to take into cognizance only traditional profitability measures. The model is rewritten as follows:

$$Return\ on\ asset = f(earnings\ quality) \dots \dots \dots Model\ 1$$

$$Return\ on\ equity = f(earnings\ quality) \dots \dots \dots Model\ 2$$

$$Return\ on\ capital\ employed = f(earnings\ quality) \dots \dots \dots Model\ 3$$

The study model is written in econometric form as;

$$ROA_{it} = \alpha + \beta_1 ERC_{it} + FSZ_{it} + U_{it} \dots \dots \dots Model\ 4$$

$$ROE_{it} = \alpha + \beta_1 ERC_{it} + FSZ_{it} + U_{it} \dots \dots \dots \text{Model 5}$$

$$ROC_{it} = \alpha + \beta_1 ERC_{it} + FSZ_{it} + U_{it} \dots \dots \dots \text{Model 6}$$

Where;

**ROA** = Return on asset

**ROE** = Return on equity

**ROC** = Return on capital employed

**ERC** = Earnings response coefficient as measure of earnings quality

**FSZ** = Firm size

**Decision Rule;** Accept the null hypothesis if the calculated coefficient-statistics probability value is greater than the significant level of 0.05.

### RESULTS

#### Descriptive Statistics

**Table 1: Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max	Prob
ROA	88	.0070592	.1458393	-1.146512	.3405665	0.0000
ROE	88	.0157541	.2672341	-.9953611	.8690682	0.0004
ROC	88	.014211	.0523793	-.1453615	.2265915	0.0056
ERC	88	.0936364	.564962	-2.78	1.26	0.0000
FSZ	88	6.976024	.7225347	5.409077	8.56847	0.9285

Source: Stata output

Table 1 shows the data used for analysis. The number of observations used for the study is 88. This represents data for 11 selected companies with a spread of 8 years for each company. The return on assets (ROA) data reveals a mean value of 0.0070592 ratio with a deviation of 0.1458393. ROA has maximum and minimum ratio values of 0.3405665 and -1.146512. Return on equity (ROE) data reveal a mean value of 0.0157541 ratio with a deviation of 0.2672341. ROE have maximum and minimum ratio values of 0.8690682 and -0.9953611. The return on capital employed (ROC) data reveal a mean value of 0.014211 ratio with a deviation of 0.0523793. ROC have maximum and minimum ratio values of 0.2265915 and -0.1453615.

For earnings response coefficient (ERC), the data reveal a mean value of 0.0936364 units with a deviation of 0.564962 units. ERC has maximum and minimum values of 1.26 Naira and -2.78



Naira. As a control variable, firm size (FSZ) data reveal a mean value of 6.976024 log with a deviation of 0.7225347 units. FSZ has maximum and minimum log values of 8.56847 and 5.409077. The maximum, minimum, means, and deviations of the variables reflects the descriptive characteristics and variance of data for each variable.

**Stationarity test:** Table 1 shows that, data for ROA, ROE, ROC and ERC all have combined Kurtosis and Skewness probability values that are less (<) than 0.05. This shows that, they are not normalized due to the fact their respective deviations are higher than the means. This proves that there is high variance in the spread of ROA, ROE, ROC, and ERC data across the companies. Although this is the case, the data set are ratio in nature thus, further corrections cannot be made rather the study relies on subsisting pre and post regression diagnostic test like the fisher statistic and the correlation test for multi-collinearity to validate the result obtained in this study. Regardless, the FSZ data as a control variable is normalized as the probability is greater than 0.05. This shows that the firm size values for the companies are not greatly dispersed.

**Regression Analysis**

This section analyzed the regression data in respect to earnings response variable tested against the profitability ratios (ROA, ROE and ROC). First, the multi-collinearity test is discussed between the ERC variable and the firm size variable as a control variable. This is to ensure that the control variable is not correlated with the independent variable to the extent of distorting the outcome of the regression result.

**Table 2: Correlation result**

	<u>ERC</u>	<u>FSZ</u>
ERC	1.000	
FSZ	0.0462	1.000

Source: Stata output

From table 2 above, it is noted that the ERC and FSZ record a correlation value of 0.0462. This is below 0.75 which is considered harmful. Thus, the subsisting multivariate regression is free from multi-collinearity issues.

**Table 3: Multivariate regression between ERC and ROA, ROE and ROC**

Variables	R <sup>2</sup>	FSZ	Const.	Coef.	Prob.	F.Stat	F.Prob
ROA	0.0788	0.010	.3930184	-.0136883	0.612	3.634828	0.0306
ROE	0.1787	0.000	1.089861	-.0294923	0.528	9.247052	0.0000
ROC	0.1262	0.003	.1745471	-.0140326	0.140	6.137408	0.0032

Source: Stata output

The table above shows the outcome of a multivariate regression for earnings response against three independent variables (ROA, ROE, and ROC). Each of the model within the multivariate model is discussed individually under each paragraph below.

For the ERC and ROA model, the  $R^2$  statistics of 0.0788 shows that, earnings response of the service companies is responsible for 7.88% change in their return on assets. The remaining 92.2% is caused by other factors not included in this model like that capital structure. The constant (Const.) value of 0.3930184 reveals that the ROA of the companies can increase by 0.3930184 ratio without consideration to any other factor but the coefficient (Coef.) value of -0.0136883 shows that, when earnings response is considered, the ROA decreases by 1.36% but this causal effect is significantly ( $0.010 < 0.05$ ) controlled by the firm size of the companies. Lastly, the F.prob of the model shows that the model is fit given a value of  $0.0306 < 0.05$ .

In respect to the ERC and ROE model, the  $R^2$  statistics of 0.1787 shows that, earnings response of the service companies is responsible for 17.87% change in their return on equity. The remaining 82.2% is caused by other factors not included in this model like that capital structure. The constant (Const.) value of 1.089861 reveals that the ROE of the companies can increase by 1.089861 ratio without consideration to any other factor but the coefficient (Coef.) value of -0.0294923 shows that, when earnings response is considered, the ROE decreases by 2.94% but this causal effect is significantly ( $0.0000 < 0.05$ ) controlled by the firm size of the companies. Lastly, the F.prob of the model shows that the model is fit given a value of  $0.0000 < 0.05$ .

For the ERC and ROC model, the  $R^2$  statistics of 0.1262 shows that, earnings response of the service companies is responsible for 12.62% change in their return on capital employed. The remaining 87.4% is caused by other factors not included in this model like that capital structure. The constant (Const.) value of 0.1745471 reveals that the ROC of the companies can increase by 0.1745471 ratio without consideration to any other factor but the coefficient (Coef.) value of -0.0140326 shows that, when earnings response is considered, the ROC decreases by 1.40% but this causal effect is significantly ( $0.003 < 0.05$ ) controlled by the firm size of the companies. Lastly, the F.prob of the model shows that the model is fit given a value of  $0.0032 < 0.05$ .

### Test of Hypotheses

**H<sub>01</sub>:** Earning quality has no significant effect on return on asset of listed service companies in Nigeria.

From table 3, the significant probability (Prob) value of  $0.612 > 0.05$  for ERC against ROA shows that, the null hypothesis is accepted and the alternative rejected. Therefore, earning quality has no significant effect on return on asset of listed service companies in Nigeria.

**H<sub>02</sub>:** Earning quality has no significant effect on return on equity of listed service companies in Nigeria.

From table 3, the significant probability (Prob) value of  $0.528 > 0.05$  for ERC against ROE shows that, the null hypothesis is accepted and the alternative rejected. Therefore, earning quality has no significant effect on return on equity of listed service companies in Nigeria.

**H<sub>03</sub>:** Earning quality has no significant effect on return on capital employed of listed service companies in Nigeria.

From table 3, the significant probability (Prob) value of  $0.140 > 0.05$  for ERC against ROC shows that, the null hypothesis is accepted and the alternative rejected. Therefore, earning quality has no significant effect on return on capital employed of listed service companies in Nigeria.



## DISCUSSION OF FINDINGS

From the hypotheses tested, the result revealed that earnings quality has no significant effect on the profitability of listed service companies in Nigeria. This proves the point that, the quality of signals about the financial reports produced by service companies in Nigeria is weak and does not spur investors to financing investments that contributes to profitability of the companies. This contradicts the signaling theory preposition held by Spence in 1973. It might be due to the nature of Nigerian market which is believed to be underdeveloped by investors thus may take the information produced by companies on the market to be of less value relevant and poor response to their earnings announcement. The argument made in this study conforms to that of Rathnayake et al. (2021) who examined the impact of financial reporting quality on firm performance in listed companies in Sri Lanka. They found an overall insignificant relationship between financial reporting quality and individual financial performance indicators like return on assets and return on equity.

## CONCLUSION AND RECOMMENDATION

Conclusively, the study shows that, earnings quality has a negative relationship with the profitability of the listed service companies in Nigeria. Also, that earnings quality has an insignificant effect on the profitability of the listed service companies in Nigeria. In line with the study's conclusion, it is recommended that, listed service companies in Nigeria should put in place earnings quality mechanisms like prompt earnings announcement and more explanatory notes to enable more value relevant reporting that can spur investment financing by investors. This will attract more external financing that will make available funds for more profitable investment.

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