

Executive Compensation, Human Capital Efficiency and Financial Performance of Listed Conglomerates in Nigeria

Ejike C. Nwankpa, Ph.D¹, James Ayuba Akwe², Sir Kenneth Ifeanyi Opara, Ph.D.³

¹Department of Accounting, Philomath University, Abuja

²Infrastructure Concession Regulatory Commission, Abuja

³National Population Commission Headquarters, Abuja

DOI: <https://doi.org/10.47772/IJRISS.2026.100500599>

Received: 28 May 2026; Accepted: 03 June 2026; Published: 09 June 2026

ABSTRACT

The study examined “the moderating effect of human capital efficiency on the relationship between executive compensation and financial performance of listed conglomerates in Nigeria between 2016 and 2025. Three variables were chosen as independent indices; including total executive compensation, chairman’s sitting allowance and highest paid director, tobin-Q was the dependent variable while human capital efficiency was used as the moderating variable. The analysis started with examining the characteristics of the data series by testing their normality and correlation. Analysis from the study using Random Effects Model of Panel Least Squares regression on e-views 10 showed that all the independent variables are insignificantly positive in explaining the movement in financial performance of listed conglomerates in Nigeria. The model also revealed that human capital efficiency was insignificant in moderating the relationship between executive compensation and firm performance. The study therefore concluded that the effect of executive compensation on firm performance is not strong enough to establish a significant predictive relationship, and that human capital efficiency does not moderate the relationship between executive pay and firm performance. Based on these findings, the study recommended that the Conglomerate Firms should ensure that all executives are paid their due compensation yearly, while they should also strengthen the relationship between executive compensation and financial performance indicators.

Keywords: Executive Compensation, Chairman’s Sitting Allowance, Highest Paid Director, Human Capital Efficiency, Financial Performance, Conglomerates, Tobin-Q JEL Classification Codes: G34, G16, G12

INTRODUCTION

The nexus between executive compensation and firm performance has drawn significant attention in recent years, with researchers and practitioners seeking to understand the interplay between pay, incentives, and performance in listed companies across diverse sectors. The purpose of executive remuneration is to compensate executives in line with their performances. Executive compensation can therefore be defined as that reward package availed to the management of a company in order to appreciate them for the work done, encourage them for what they are doing and motivate them for the work ahead, in order to achieve better performance in the future.

There are three basic purposes of executive compensation in any organization. The first is to reward executives according to their performance, secondly to mitigate the tendency of managers behaving in ways that will be counter to the interest of shareholders, thirdly is to motivate future dedicated work for the benefit of stakeholders. Furthermore, the expectation is that the executive management of a firm should work in the interests of the stakeholders. But the possibility that this will not happen and that the executives will work for their personal interest as opposed to the interests of the entity is always there (Khanna, 2016). Hence, this possible discrepancy can be taken care of by aligning the interests of the executives with the interests of the stakeholders.

According to Adegoroye, Sunday, Soyinka, and Ogunmola (2017), the connection between the performance of a firm and executive compensation has dominated accounting and finance research for nearly three decades but without harmony on the state of the relationship. Adebayo, Ayeni and Oyewole (2021) also stated that there are various works with divergent outcomes on the nexus between executive management remuneration and financial performance of listed companies. The financial performance is an important factor in the conglomerate sector as it affects the shareholder wealth and interest of other stakeholders.

A conglomerate is a company that operates across various sectors like manufacturing, food, energy, consumer goods, etc. Conglomerates are key drivers in the economy based on their involvement across sectors, hence they are known as diversified industries. Despite its significance, research on the correlation between compensation and performance remains insufficient especially in the conglomerate sector, necessitating further studies, particularly given the prevalent challenges faced by conglomerates in Nigeria in Nigeria. Questions have arisen regarding why executives continue to receive bonuses and perks even when their companies experience losses and declining shareholder value.

The foregoing is closely linked to expectancy theory, which is based on three key elements: expectancy, instrumentality, and valence. A person is motivated to the degree that he or she believes that (a) effort will lead to acceptable performance (expectancy), (b) performance will be rewarded (instrumentality), and (c) the value of the reward is highly positive (valence).

Human Capital Efficiency measures the value added by the Human Resources of an organization (Kwarbai and Akinpelu, 2017). Pulic (2000) introduced a value-added intellectual coefficient (VAIC) model including human capital efficiency, structural capital efficiency, and capital employed efficiency to measure the value added from tangible and intangible assets. Wardovo and Utami (2024) agreed that this model is a standard measurement method, allowing comparisons between sectors and countries. Therefore, it is crucial to examine how executive compensation and firm performance are influenced by human capital efficiency in the Nigerian conglomerates sector.

A look at the financial performance of listed conglomerates in Nigeria is a source of concern. The Earnings Per Share of listed conglomerates in Nigeria over the past five years (2020 to 2024) shows unstable movement, as extracted from the respective audited annual reports. This noticeable variability in financial performance is reflective of the high level of risk faced by shareholders in the conglomerates sector. Hence, Nigerian conglomerates struggle to maintain investor confidence, resulting from unstable financial performance over time.

The foregoing have raised some pertinent questions that require a logical and empirically generated solution. Does the compensation received by executive management of conglomerates affect the value of the firms in Nigeria. Does human capital efficiency moderate the relationship between executive compensation and financial performance of listed conglomerates in Nigeria. A lot of studies have explored the association of executive compensation with the firm performance in Nigeria, utilizing various proxies to measure firm performance and executive compensation. However, most of the works focused on the banking sector. This calls for the need to extend such investigation into other sectors of the economy.

Most of the existing work used various proxies to moderate the relationship between compensation and performance. Such variables include share ownership, board independence, firm size, etc. None of the reviewed works have tested the effect of human capital efficiency on the nexus between the dependent and independent variable except that of Zik-Rullahi, Onmonya, Uthman and Ebire (2024) which focused on listed banks in Nigeria. Hence, there is need to explore whether human capital efficiency has any moderating power over the relationship between executive compensation and financial performance of listed conglomerates in Nigeria. The remaining part of this work are as follows: section 2 presents the review of prior literature and provides the theoretical perspective of the Study; section 3 provides the methodological approach for the Study; section 4 focuses on the study's analysis and discussion of findings; and section 5 summarizes and concludes the Study.

REVIEW OF LITERATURE

This study examined the moderating effect of human capital efficiency on the relationship between executive compensation and financial performance of listed conglomerates in Nigeria.

CONCEPTUAL FRAMEWORK

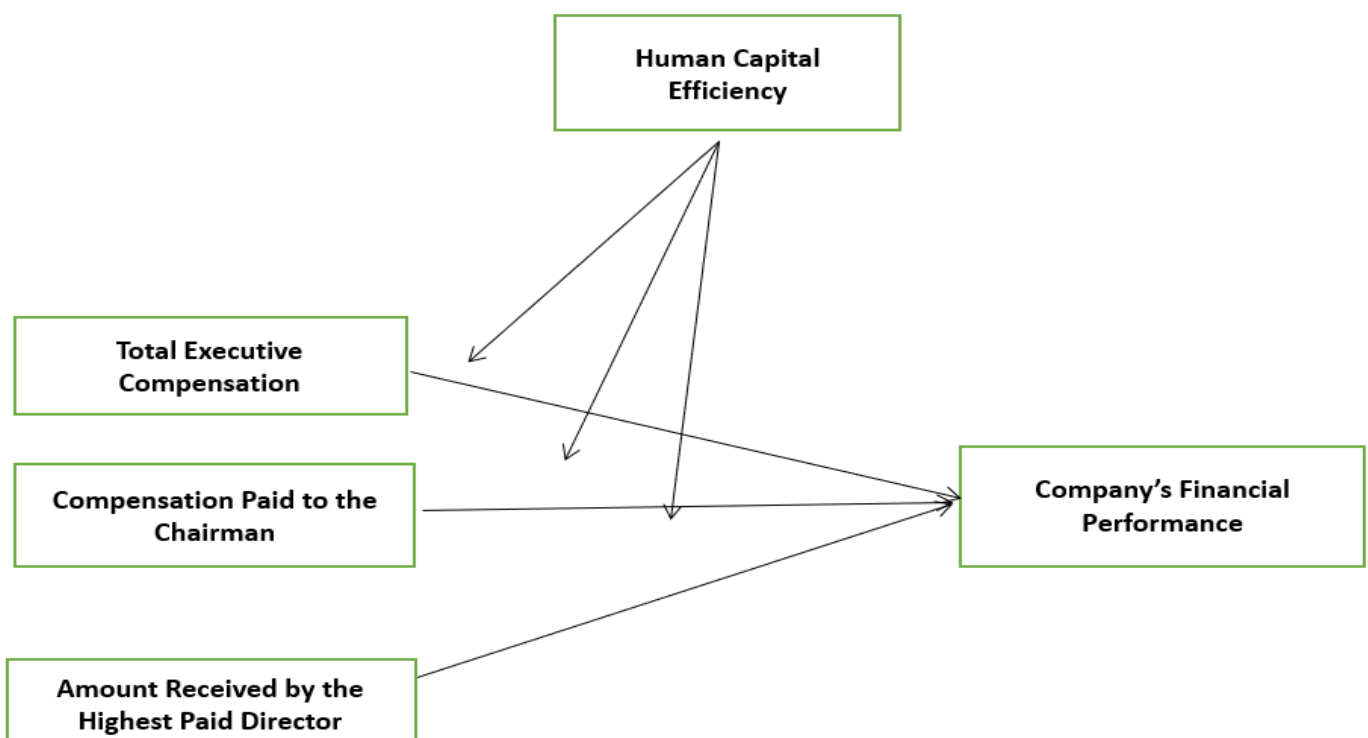
According to Obasan (2021), Executive compensation is the total package of remuneration which directors and senior management of a firm are given as reward for their jobs and contribution to the prospects of the organization where they work. These rewards could be in the form of salary, bonuses, and shares offers or call options on the company's stock (Omoriegbe and Keilkume, 2016).

Saidu, Bello and Jibril (2017), stated that executive compensation refers to all forms of rewards from different sources accruing to a firm's top management staff and directors. Adegoroye et al (2017) concluded that the aim of executive compensation is to reward appropriate performance.

Financial performance is an indispensable concept which connotes the way in which a firm's financial resources are carefully utilized in order to attain its general goal. Odiwo, Chukwuma and Kifordu (2016) asserted that firm performance is the effective and efficient manner in which managers of an organizations utilize resources to achieve set objectives. Existing studies on executive compensation practices and firm performance have employed market-based measures such as Stock price, earnings per share, dividend per share, etc; as well as accounting-based measures such as Return on equity (ROE), Return on Assets (ROA); and Tobin's Q as proxies for firm performance. Otiko et al (2025) studied the effect of board characteristics on market value of listed consumer goods firms in Nigeria and used Tobin-Q as measure of firm's market value.

Human Capital Efficiency measures the value added by the Human Resources of an organization (Kwarbai and Akinpelu, 2016). Human capital efficiency is one of the key components of the VAIC model, and it is defined as employees' skills, general knowledge, innovation, and ability. Pulic (2000) introduced a value-added intellectual coefficient (VAIC) model including human capital efficiency, structural capital efficiency, and capital employed efficiency to measure the value added from tangible and intangible assets. This model is considered a standard measurement method (Wardoyo & Utami, 2024), allowing comparisons between sectors and countries. In addition, due to its simplicity in the use of available data from financial statements, this model has widely been employed across board. In this study, human capital efficiency have been used as the moderator of the relationship between executive compensation and financial performance of listed conglomerates in Nigeria. The diagram below shows the study's conceptual framework.

Figure 1: Conceptual Framework



Source: Conceptualised by the Researcher, May 2026.

THEORETICAL FRAMEWORK

Expectancy theory is a motivational framework suggesting that individuals are more motivated to act if they believe their effort will lead to good performance. Kantudu and Zik-rullahi (2020) quoted Lunenburg (2011) that the expectancy theory is a cognitive process theory of motivation. They added that Vroom (1964) was the first to develop an expectancy theory with direct application to work settings, which was later expanded and refined by Porter & Lawler (1968) and others. The expectancy theory based on these assumptions has three key elements: expectancy, instrumentality, and valence. A person is motivated to the degree that he or she believes that (a)

effort will lead to acceptable performance (expectancy), (b) performance will be rewarded (instrumentality), and (c) the value of the reward is highly positive (valence). The Expectancy Theory have been chosen as the theoretical underpinning of this study because the theory fits well into being used to test the conceptual framework of the study. The three factors viz expectancy, performance and valence are paramount and needs to be considered while making policies concerning executive remuneration. The three factors are expectancy, performance and valence. This implies that, if executives put in good efforts which ultimately lead to good performance, they should be guaranteed of their desired rewards.

Empirical Review

Oyerogba et al. (2016) examined the impact of executive compensation on firms' profitability of listed companies in Nigeria using a period of ten years ranging from 2004 to 2013. The results revealed that a significant positive relationship exists between the directors' cash incentives, bonus issues of shares, and earnings per share. The relationship between non-cash incentive and earnings per share was insignificant implying that non-cash incentive does not significantly influence the earnings per share of companies in Nigeria. In Pakistan, Ashrat, Ahmad and Mehmood (2017) examined financial leverage and performance of 10 public listed companies out of the 16 companies from fuel and energy sector of Karachi Stock Exchange. The study found a positive relationship between financial leverage and firm performance.

Otekunrin et al (2018) examined the relationship between directors' compensation and firm performance using selected general insurance companies as a case study. The regression results showed that a significant relationship exists between annual directors' compensation and firm performance. Aslam et al. (2019) investigated the interrelationship between pay and performance of CEOs/board of directors in an emerging market, Pakistan. Findings of the study show that director's cash remuneration and bonuses have a positive effect on the EPS. The study timeframe terminated in 2018. Sheikh et al., (2019) examined the impact of CEO compensation on unobserved firm performance in an emerging market of Pakistan. The study uses an unbalanced panel data consisting of 1,508 firm-year observations from 225 non-financial listed companies in Pakistan Stock Exchange (PSX) for period 2005 to 2012. The study used multiple regression models adjusted to heteroskedasticity and autocorrelation in error terms. The study finds that CEO compensation is positively associated with future operating performance.

Adeoye et al (2021) evaluated the effect of executive compensation on financial reporting quality in Nigerian financial service industry for the period covered 2006-2017 using 14 quoted deposit money banks. The results showed executive compensation has a negative significant relationship with financial reporting quality. Grey, Flynn and Adu (2024) examined the effect of Chair-CEO diversity on the relationship between executive remuneration and firm performance of 262 UK listed firms from 2009 to 2020 under an ex-post facto research and found that Chair-CEO diversity is negatively associated with executive remuneration levels.

Ohidoa and Kolade (2024) ascertained the relationship that exists between executive compensation and firms' financial performance in Nigeria of all the listed firms listed in the Nigerian from 2014-2022. The regression result showed that executive compensation had a positive relationship with firm performance when proxied using returns on equity and return on asset. with Tobin's Q. Oyaro, Memba, Oluoch and Ondabu (2025) determined the effect of executive compensation structure on the financial distress of Nairobi Securities Exchange-listed non-financial firms. The study was anchored on the agency theory and determined that a significant negative correlation exist between executive compensation structure and financial distress.

Omorie (2016) examined the relationship between executive compensation and banking sector performance in Nigeria using the panel vector error correction model (PVECM). The impulse response of the PVECM showed that executive compensation proxied by chairman's remuneration responded positively to customers' deposits and equity-asset ratio. Kabiru, (2017) examined the effect of top executive compensation on the financial performance of Nigerian banks using causal research design. Panel data was used to analyze the compensation-performance impact of nine banks over five year period. The study found a positive and significant link between chairman's sitting allowance and the profit before tax of the sampled banks.

Abrokwah et al (2018) tested the impact of short-term and long-term executive compensation packages on firm risk. Their study was conducted using a fixed-effect model specification with panel data from the executive compensation dataset over the annual sample period from 1992 to 2015 in the United States. The study established that the relationship between executive compensation components and firm risk differs across sections of the economy. Dias, (2020) traced the links between executive compensation structure and firm performance in Brazilian market, finding a positive relationship between the performance of companies and the variable incentives of executive compensation, especially the long-term incentive, as well as a negative relationship between the performance of firms and the fixed component of the compensation structure.

Kantudu and Zik-rullahi (2020) examined the moderating effect of share ownership on the relationship between executive compensation and value of listed deposit money banks (DMB) in Nigeria. The study adopted correlational research design with balanced panel data of 14 listed banks which served as population of the study for the period of 2007-2018 using Generalized Least Square (GLS) regression as a tool of analysis. The study found that CEO Pay and Chairman's compensation have positive effect on the value of listed banks. Al-Shammari (2021) examined the nexus between executive compensation and firm performance and empirically tested the intervening effect of CEO risk-taking behavior on this relationship. Specifically, it hypothesize that CEO compensation indirectly influences firm performance through its direct effects on CEO risk-taking behavior. Results based on data collected from 204 U.S. manufacturing firms revealed a strong, positive relationship between CEO option pay and a firm's strategic risk, stock returns risk, and income stream risk.

Barde et al (2023) examined the relationship between executive compensation and value of listed deposit money banks (DMB) in Nigeria. The study adopted correlational research design with balanced panel data of 14 listed banks which served as population of the study for the period of 2010-2021 using Generalized Least Square (GLS) regression as a tool of analysis. The study found that CEO Pay and Chairman's compensation have positive effect on the value of listed banks.

Yahaya (2025) investigated the relationship between Chief Executive Officer (CEO) incentives and earnings management in publicly traded firms. Using a quantitative research design, panel data from 147 publicly listed companies over ten years (2014-2023) were analyzed. A random effects panel regression model was employed to test the relationship, controlling for firm-specific variables. The findings reveal a significant positive relationship between equity-based CEO incentives and the extent of earnings management.

Ntim et al (2017) examined the crucial question of whether chief executive officer (CEO) power and corporate governance (CG) structure can moderate the pay-for-performance sensitivity (PPS) using a large up-to-date South African dataset. The findings was that when direct links between executive pay and performance are examined, it is a positive. Saidu, Bello and Jibril (2017) examined the effect of change in industry-type on compensation-performance study. The study used ex post-facto research design to test its objectives using ten year data drawn from banking and construction industries with results obtained from data analysis using both descriptive and inferential statistics. Both correlation and OLS results revealed significantly negative and positive results on banking and construction industries respectively.

Husni, Rahim and Aprayuda (2019) investigated the effect of cash compensation, corporate governance, ownership and dividend policy on the performance of banks in Indonesia. The data for the study were obtained from the financial statements of 33 banks for the period 2013 to 2018. The data were analysed with regression and random effect. The result of the regression shows that executive compensation have significant positive effect on company performance.

Kantudu and Zik-rullahi (2020) examined the moderating effect of share ownership on the relationship between executive compensation and value of listed deposit money banks (DMB) in Nigeria. The study adopted correlational research design with balanced panel data of 14 listed banks which served as population of the study for the period of 2007-2018 using Generalized Least Square (GLS) regression analysis. The study found that CEO Pay and Chairman's compensation have positive effect on the value of listed banks. Barde et al (2023) examined the relationship between executive compensation and value of listed deposit money banks (DMB) in Nigeria. The study adopted correlational research design with balanced panel data of 14 listed banks which served as population of the study for the period of 2010-2021 using Generalized Least Square (GLS) regression as a tool of analysis. The study found that CEO Pay and Chairman's compensation have positive effect on the value of listed banks.

Sha'awa et al (2023) studied the effect of executive compensation on financial performance of listed non-financial firms in Nigeria. A correlational research design was used based on a filtered census population of 63 firms listed on Nigeria's stock exchange. Secondary data was obtained from the annual financial reports of these firms and analyzed using the generalized methods moments. The study found salary emoluments, bonuses and stock-based compensation, as measures of executive compensation, have negative impact on the return on equity of listed non-financial firms in Nigeria.

Asuquo, Etim, Unirere, Adebayo and Bassey (2025) investigated the effect of firm attributes on financial reporting quality of deposit money banks in Nigeria for 20 deposit money banks with the sample size of 3 listed deposit money banks in the floor of Nigeria Exchange Group (NGX) 2023. It was concluded that firm size, firm remuneration and firm independence have no significant effect on financial reporting quality of deposit money banks in Nigeria.

Tran and Vo (2018) examined if bankers should be concerned with intellectual capital in the Thai banking sector. In this study, Human capital was calculated by taking the profit before taxes plus employee expenditures because pretax profit indicates the residual value after deducting all costs from sales except employee expenditures. It used the generalized method of moments (GMM). The finding was that human capital efficiency affects firm financial performance. Nhon et al. (2018) carried out a survey of 319 Vietnamese ICT firms to measure the effect of intellectual capital (including human capital, social capital, organizational capital) on firm performance. They concluded that human capital and social capital are strongly linked to firm performance. The study was done in Vietnam, while the current study is done in Nigeria.

Tran and Vo (2020) examined the contribution of human capital efficiency to firm performance across 12 sectors in the Vietnamese economy for the period 2011 to 2018. The generalized method of moments (GMM) technique is used in this paper. Empirical results in this paper strongly confirm that human capital efficiency makes a positive contribution to firm performance across sectors in Vietnam.

Edochie, Agbi and Mustapha (2022) examined whether CEO compensation impact on firm performance to determine whether independent board directors mediate the relationship between CEO compensation and firm performance. This study sample is the five conglomerate companies listed on the Nigeria stock exchange from the period of 2013 to 2020, 8 years. CEO compensation was proxied by the natural logarithms of the pay of the CEO and firm performance was proxied by ROA. The study used a balanced panel data consisting of 40 firm-year observations. The OLS regression model was used after adjusting for heteroskedasticity and hausman test breusch and pagan lagrangian multiplier test. The results revealed that CEO compensation has a positive and significant impact on firm performance.

Zik-Rullahi, Onmonya, Uthman and Ebire (2024) studied the role of human capital on the relationship between executive compensation and financial performance of banks in Nigeria from 2008 to 2022. Correlational research design was adopted, a panel regression was employed to test the hypotheses. The findings reveal that highest paid director have a negative and significant relationship with financial performance of banks in Nigeria.

The empirical literature shows that all the works reviewed are different in terms of their methodology, nature of data, location, timeframe and findings. This study is peculiar because it identified and filled the following gaps. All the studies reviewed used data that have been overtaken by the effluxion of time. The recent works in terms

of its data are those which has timeframes terminating in 2023, such as Asuquo et al (2025), Oyaro et al (2025), Ugbe, Naburgi and Musa (2025). Although the literature is replete with studies on the relationship between executive compensation and financial performance of listed firms, most of the works are concentrated on the banking sector. For the conglomerates sector, the only work reviewed was that of Edochie, Agbi, and Mustapha (2022). Most of the works reviewed studied only the direct nexus between executive compensation and financial performance. For some works, they made use of moderating variable. Tran and Vo (2020) moderated with human capital efficiency but the study was done in Vietnam. Kantudu and Zik-rullahi (2020) as well as Barde and Zik-rullahi (2020) moderated the relationship with executive share ownership and their work was in the banking sector. Edochie, Agbi, and Mustapha (2022) used independent directors pay as moderating variable. Zik-Rullahi, Onmonya, Uthman and Ebire (2024) used human capital efficiency to moderate but the work was done in the banking sector. Hence, a gap exist being that the existing reviewed literature did not contain any work that tested the moderating power of human capital efficiency on the relationship between executive compensation and financial performance, in the Nigerian conglomerates sector.

RESEARCH METHODOLOGY

This study adopted quantitative ex-post facto research design by reliance on quantitative secondary data for the study population. The time series and cross-sectional data had already been prepared in the annual financial statements of the studied organisations from where the relevant data was retrieved by the researcher for this purpose. Secondary data sources were utilized, primarily drawn from the published annual reports and accounts of the listed conglomerates in Nigeria, The testing method adopted was the panel regression model. The study population comprised the five (5) listed conglomerates whose shares were traded on the floor of the Nigeria Exchange (NGX) as at 31 December 2025. The data for the study covered a period of 10 years running from January 2016 – December 2025. This data set is considered robust enough to smooth out any irregularities in the cycle. Census sampling was used in which information is gathered from every member of the population, which improves the accuracy and reliability of data.

The sources of data for the study comprised the audited financial statements of the listed conglomerates for the period of ten years running from January 2016 to December 2025, and the NGX Daily Official lists for the last trading days in the relevant years.

Descriptive statistics was extracted for all the variables covered by the research. The data was subjected to Correlation Matrix analysis to ascertain the nature of relationship among the variables. In this study, Nigerian conglomerates Tobin Q is the dependent variable while executive compensation variables served as the independent variable. The Hausman test was conducted to determine the extent to which the model contains predictor variables or otherwise leading to the choice of model between the fixed effect and random effect panel ordinary least square estimation. This study conducted post-diagnostic tests for Multicollinearity and heteroskedasticity.

The functional model for this study is stated as follows:

$$TQ = F(TEC, HPD, CSA, HCE, TEC*HCE, HPD*HCE, CSA*HCE).....(1)$$

The model is stated econometrically as;

$$TQ_{it} = \beta_0 + \beta_1 TEC_{it} + \beta_2 HPD_{it} + \beta_3 CSA_{it} + \beta_4 HCE_{it} + \beta_5 TEC*HCE_{it} + \beta_6 HPD*HCE_{it} + \beta_7 CSA*HCE_{it} + \varepsilon_{it}.....(2)$$

Where;

TQ_{it} = Tobin Q at time t

TEC_{it} = Total Executive Compensation at time t

HPD_{it} = Highest Paid Director at time t

CSA_{it} = Chairman's Sitting Allowance at time t

HCE_{it} = Human Capital Efficiency at time t

ε = error term

i and t = Conglomerates i and year t

β_0 = Intercept of the regression line

β_1 - β_3 = Coefficient of the independent variables

β_4 = Coefficient of the moderator variable

β_5 - β_7 = Coefficients of the moderating variables

Table 1: Variable Measurement

Variable	Notation	Nature of Data	Measurement in this Study	Supporting Studies
Tobin Q	TBQ	Dependent Variable	Market value of all outstanding stock divided by Replacement value of all production capacity	Wolfe et al (2003), Barde et al (2023), Otiko et al (2025).
Total Executive Compensation	TEC	Independent Variable	The compensation of all the Executive Directors	Adeoye et al (2021), Chen et al (2023), Zik-rullahi et al (2024)
Chairman's Sitting Allowance	CSA	Independent Variable	The sitting Allowance to the Chairman	Ozkan (2011), Barde & Zik-rullahi (2020), Barde et al (2023)
Highest Paid Director	HPD	Independent Variable	Pay of the Highest Paid Director	Barde et al (2023), Zik-rullahi et al (2024)
Human Capital Efficiency	HCE	Moderator Variable	Profit Before Tax plus salaries divided by personnel expense	Tran & Vo (2020), Zik-rullahi et al (2023)

Source: Field Survey, May 2026.

Data Analysis and Interpretation

The study data analysis comprised descriptive statistics, correlation analysis, hausman test and panel data regression using random effects method. The outcome of these tests are presented and discussed in this section.

Table 1: Descriptive Statistics

	TOBIN-Q	TOTAL EXECUTIVE COMENSATION	CHAIRMAN'S SITTING ALLOWANCE	HIGHEST PAID DIRECTOR	HUMAN CAPITAL EFFICIENCY
Mean	0.8342	663,243,600	21,369,020	51,888,180	4.3026
Median	0.5200	221,827,000	11,135,000	33,426,000	2.31
Maximum	9.3600	13,494,582,000	150,000,000	216,056,000	21.08
Minimum	0.0600	1,465,000	0.00	0.00	-6.72
Std. Dev.	1.3767	1,917,128,306	29,036,421	54,401,849	5.9102
Skewness	5.6780	6.1787	2.1328	0.9648	1.1947
Kurtosis	31.1179	41.8054	8.9037	3.1460	4.6379
Jarque-Bera	1862.00	3455,34	110.5193	7.8020	17.4841

Probability	0.00	0.00	1.0024	0.0202	0.00
Observations	50	50	50	50	50

Source: Eviews Output, May 2026

The table above shows the mean, median, maximum value and minimum value and the distribution of the sample measured by the standard deviation, skewness, kurtosis and the Jarque-Bera statistics. The descriptive statistics exhibits the mean value of Tobin-Q (TBQ) to be 0.8342, maximum value of 9.36, the minimum value of 0.06, and standard deviation of 1.3767. The standard deviation value of TBQ is more than the mean value which indicates that the data are widely dispersed from the mean. The skewness value of TBQ is 5.0780 and positive indicating that the distribution of the variables is asymmetric in nature and skewed to the right.

The table 1 shows the average value Total Executive Compensation (TEC) to be 663,243,600. The minimum value of TEC is 1,465,000 with maximum value of 13,494,582,000 and standard deviation of 1,917,128,306. The standard deviation is less than the mean, implying that the data are not widely dispersed from the mean. The skewness value of TEC is 6.1787 which is positively skewed. Similarly. The kurtosis value of TEC is 41.8054, it shows that the variable is normally distributed.

The descriptive statistics reveals that Chairman's Siting Allowance (CSA) mean is 21,369,020, maximum is 150,000,000, minimum value of 0.00 and standard deviation of 29,036,421. The standard deviation is more than the mean showing that the data are widely dispersed from the mean. The skewness value of the variable is 2.1328, the variable is positively skewed which implied that the data sets have long left-tails. Also, the table reveals that the average of Highest Paid Director (HPD) is 51,888,180, the maximum value is 216,056,000, minimum value of 0.003, standard deviation value of 54,401,849. The standard deviation of HPD is more than the average value, it indicates that the data are widely dispersed from the mean. The skewness value of the variable is 0.6948 which is close to zero and positive, it means that the distribution of the variables is symmetric and has long right tail.

Lastly, the table reveals that the average value of Human Capital Efficiency (HCE) is 4.30, the maximum value is 21.08, minimum value of -6.72, standard deviation value of 5.91. The standard deviation is more than the average value, it indicates that the data are widely dispersed from the mean. The skewness value of the variable is 1.19 which is close to zero and positive, it means that the distribution of the variable is symmetric and has long right tail. The Kurtosis value of HCE is 4.64 which is above to 3, it indicates that the distribution series for the variable was peaked to the normal. This study used the Jarque-Bera test for normality. The results of all the variables have P-value that is less than 0.05, except for CSA. which shows that they are normally distributed.

Table 2: Correlation Matrix

Variables	TBQ	TEC	CSA	HPD	HCE
TBQ	1.0000				
TEC	0.1051	1.0000			
CSA	0.3316	0.2054	1.0000		
HPD	0.2443	0.0522	0.6882	1.0000	
HCE	0.3243	0.2773	0.5311	0.2585	1.0000

Source: E-views Output, May 2026

The table 2 presents the correlation matrix which depicts the degree and direction of the association between each pair of variables being analyzed. The correlation result indicates that all the four external factors are positively correlated to TBQ.

Table 3: Summary of Hausman Specification Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.9694	4	0.9144

Source: E-views Output, May 2026

In this panel data analysis, the null hypothesis is that the stated model is random effects, meaning that there is no correlation between the two. The decision criteria is: if the p-value is small (less than 0.05), reject the null hypothesis. The possibility that error may cluster and correlate over time can bias the outcome variables or even the explanatory variables, and as such fixed effect and random effect regressions were ran. The Hausman Specification Test in Table 3 reveals that Random Effect Model is more appropriate against Fixed Effect Model in view of the P-value of 0.9144 which is more than the critical value of 0.0500.

The test of hypothesis of this study was undertaken using the panel data regression analysis result as presented in the table 4.

Table 4: Random Effect Regression Results

Variable	Coefficient	Standard Error	t-statistics	Probability
C	0.8342	0.1947	4.2847	0.0001
TEC_C	5.5242	1.0752	0.0514	0.9592
CSA_C	7.7331	1.0882	0.7106	0.4810
HPD_C	1.9190	5.0826	0.3776	0.7075
HCE_C	0.0503	0.0406	1.2398	0.2215
R-Squared	0.1435			
Adjusted R ²	0.0673			
F-Statistics	1.8847			
Prob(F-Statistics)	0.1296			
Dubin-watson statistics	2.0911			

Source: E-views Output, May 2026

The regression line $TBQ = 0.8342 + 5.5242TEC + 7.7331CSA + 1.9190HPD + 0.0503HCE$ indicates that TBQ will rise in reaction to increases in the independent variables when human capital efficiency is average. It also shows that TBQ will increase with increase in human capital efficiency when other independent variables are average. The F-Statistic of 1.8847 and its corresponding P-value of 0.1296 indicates that the model is fit. The Coefficient of Determination (R^2) of 0.1435 indicates that about 14% of variation in TBQ can be explained by the moderating effect of HCE on the relationship between TEC, CSA, HPD and HCE. The remaining 86% are attributed to other independent variables that are not captured in the regression. However, all the p-values are greater than 0.05. The study therefore, accepted the Null Hypothesis which states that human capital efficiency does not moderate the relationship between executive compensation and financial performance of listed conglomerates in Nigeria

Table 5: Pairwise Covariance Test for Multicollinearity

Variable	TEC	CSA	HPD	HCE
TEC	1.0000			
CSA	0.2054	1.0000		
IHPD	0.0522	0.6882	1.0000	
HCE	0.2773	0.5311	0.0585	1.0000

Source: E-views Output, May 2026

The pairwise covariance coefficient is a good measure of assessing multicollinearity between the independent variables in a study. The rule of thumb is that any coefficient from 0.8000 and above shows the presence of multicollinearity. The result shows that all the coefficients fall below 0.8000. This shows the suitability of the study model being fit with the four independent variables and indicates that there is no threat of multicollinearity or independent errors.

Table 6: Heteroskedasticity Test: Breusch-Pagan LM, Pesaran Scaled LM and Pesaran CD

Tests	Statistic	df	Prob
Breusch-Pagan LM	9.3914	10	0.4954
Pesaran Scale LM	-0.1361		0.8918
Pesaran CD	0.0473		0.9623

Source: E-views Output, May 2026

Table 6 is a heteroscedasticity table which explains the homocedasticity of the study. The Probability values of 0.4954, 0.8918 and 0.9623 are greater than 5% which indicates homokedasticity of the residuals. This therefore, reveals absence of heteroscedasticity in the residuals, since the null hypothesis says that the residuals are Homoscedasticity, and the alternative hypothesis says the residuals are heteroscedasticity.

DISCUSSION OF FINDINGS

In the panel regression output, the result indicated that TEC has insignificant effect on TBQ when HCE is average. This means that increase in executive compensation results to increase in financial performance of listed conglomerate in Nigeria as moderated by human capital efficiency, however, the degree of influence is insignificant. This finding is in alignment with that of Oyerogba et al (2016), but contrary to that of Adeoye et al (2021). In the case of CSA, insignificant positive relationship was found. This shows that increase in chairman's sitting allowance led to increase in financial performance of listed conglomerates in Nigeria due to the moderating effect of human capital efficiency, however, the effect was insignificant. The findings of this study agrees with Otekunrin et al (2018) where chairman's emolument had a significant negative effect on financial performance. On the other hand, it is in contrast with the work of Grey et al (2019) where compensation was found to be significantly negative in affecting financial performance.

Based on the regression result, the moderating effect of human capital efficiency on the relationship between HPD and TBQ of listed conglomerates in Nigeria was insignificant and positive. This means that the money paid to the highest paid director impacted on the tobin-q of the studied firms between 2016 and 2025 and was moderated by human capital efficiency, however at an insignificant level. The result is in agreement with empirical findings of Aslam et al (2019), but disagrees with Grey et al (2024).

Finally, evidence from regression results indicate an insignificant positive effect of Human Capital Efficiency on financial performance of quoted conglomerates in Nigeria between 2016 and 2025, when TEC, HPD and CSA are average. The result is in agreement with empirical findings of Tran and Vo (2018), Zik-rullahi et al (2024) where human capital efficiency had a moderating effect on the relationship between executive compensation and financial performance of banks in Nigeria.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study examined the moderating effect of human capital efficiency on the relationship between executive compensation and financial performance of listed conglomerates in Nigeria between 2016 and 2025. Empirical review revealed that previous studies in this area of research were not available for the conglomerates, which created a need for more studies to be conducted in this area.

The study employed expost facto research design while the cross sectional panel data were extracted from the audited annual reports of the listed conglomerates for the relevant years of study. The Hausman specification test favored the Random effect regression. The regression result revealed that all the four variables are insignificant determinants of financial performance of listed conglomerates in Nigeria between 2016 and 2025.

The regression result revealed a positive but statistically insignificant moderating effect of human capital efficiency on the relationship between executive compensation and firms' financial performance. This suggests that although increases in executive compensation may be associated with improvements in firm performance as moderated by human capital efficiency, the effect is not strong enough to establish a significant predictive

relationship. The insignificance may be attributed to weak pay-performance alignment, firm-specific differences, macroeconomic influences, and the presence of stronger determinants of financial performance within the sampled firms

Recommendations

The study made the following recommendations based on the findings of the study:

- i. The Securities and Exchange Commission should regulated the compensation of company executives to ensure that the companies get value for the amount spent as remuneration to the executives.
- ii. In addition, the Conglomerate Firms should ensure that all executives are paid their due compensation yearly, to serve as motivation for more work. The descriptive statistics of this study showed that some firms had zero compensation for some years which could have affected the results of the analysis.
- iii. The Nigerian listed conglomerates should strengthen the relationship executive compensation and financial performance indicators. Companies should design compensation packages that are closely tied to measurable financial and operational outcomes such as profitability, return on assets, earnings growth, and shareholder value. This will ensure that executive rewards are based on actual performance rather than fixed entitlements.
- iv. Further studies should extended time horizons, and other determinants of financial performance such as firm size, leverage, liquidity, and corporate governance variables. This will increase the explanatory power of the model being tested.

REFERENCES

1. Abrokwah, S., Hanig, J., & Schaffer, M. (2018). Executive compensation and firm risk: an Examination across industries. *Review of Accounting and Finance*. 17(3), 359-382.
2. Adebayo, O. S., Ayeni, G. O., & Oyewole, F. A. (2021). Relationship between corporate governance and organizational performance: Nigerian listed organizations experience. *International Journal of Business and Management Invention*, 2(9), 1-6.
3. Adegroye, E., Sunday, O. M., Soyinka, K. A., & Ogunmola, J. O. (2017). Executive compensation and firm performance: Evidence from Nigeria. *International Journal of Advanced Academic Research/Social & Management Sciences*, 3(7), 23-39.
4. Adeoye, E. T., Akinkoye, E. O., Ayoola, T., Inneh, G., & Agelebe, G. I. (2021). Executive compensation and financial reporting quality of Nigerian financial service industry. *International Journal of Accounting & Finance Review* Vol. 7, No. 1, 130-147.
5. Al-Shammari (2021). CEO compensation and firm performance: The mediating effects of CEO risk taking behavior. *Cogent Business & Management*, 8(1), 1-19.
6. Ashrat, M., Ahmad, M. W., & Mehmood, N. (2017). The Impact of financial leverage on firmperformance in fuel and energy sector, Pakistan. *Journal of Energy Technology Policy*, 7(5), 43-47.
7. Aslam, E., Haron, R., & Tahir, M. N. (2019). How director remuneration impacts firm performance: An empirical analysis of executive director remuneration in Pakistan. *Borsa Istanbul Review*, 19(2), 186-196
8. Asuquo, N. I., Etim, O. E., Unirere, P. G., Adebayo, J. A. & Bassey, E. O. (2025). Firm attributes and financial reporting quality of deposit money banks in Nigeria. *POLAC International Journal of Economics and Management Sciences*, vol 12, no 1, 14-24.
9. Barde, I. M. & Zik-rullahi, A. A. (2020). Effect of executive compensation and share ownership on financial performance of listed deposit money banks in Nigeria. *Journal of Accounting and Taxation*, 12(1), 1-11.
10. Barde, I. M., Kantuku, A. S., Dandago, K. I., Jalingo, U. A., Zik-rullahi, A. A., Yusuf, A., Maigoshi, Z. S., Golo, I. A. & Sulaima, B. A. (2023). Executive compensation and value of listed deposit money banks in Nigeria. *FUDMA Journal of Accounting and Finance Research*, 1(1), 188-208.

11. Boakye, D. J., Ahinful, G. S. & Nsor-Ambala, R. (2020). Chief Executive Officer compensation and financial performance: Evidence from the alternative investment market in the UK. *Indian Journal of Corporate Governance* 13(1) 63–84.
12. Buachoom, W. (2017). Simultaneous relationship between performance and executive compensation of Thai non-financial firms. *Asian Review of Accounting*, 25(3), 404-423.
13. Chen, K., Yu, Y., Jiang, P., Bao, H., & Ni T. (2023). The impact of equity incentives on the financial performance of new energy enterprises. *Journal of Environmental Economics and Management*, 11, 1-13.
14. Edem, D. A. P., Nyor, T., Ahmed, N. M. & Agbi, S. E. (2025). Environmental, social and governance disclosures and value of listed consumer goods firms in Nigeria: role of executive compensation. *International Journal of Accounting Finance and Social Science Research*, volume 3, issue 1, 42-68.
15. Edochie, E., Agbi, S. E. & Mustapha, L. O. (2022). CEO compensation and firm performance: evidence from Nigeria conglomerates firms. *IOSR Journal of Economics and Finance*, 13(1), 23-30
16. Emmanuel, A., Michael, S.O., Akanfe, S.K., & Oladipo, O.J. (2017). Executive Compensation and Firm Performance: Evidence from Nigeria Firms. *International Journal of Advanced Academic Research, Social & Management Sciences*, 3(7), 23-39
17. Dias, A., Vieira, V., & Figlioli, B. (2020). Tracing the links between executive compensation structure and firm performance: evidence from the Brazilian market. *Corporate Governance. The International Journal of Business in Society*, 20(7), 1393-1408
18. Fubara, I. F. (2019). Compensation and employee performance of banks in Port Harcourt, Nigeria. *International Journal of Research and Innovation in Social Sciences*, III (v).
19. Grey, C., Flynn, A. & Adu, D. A. (2024). An examination of how executive remuneration and firm performance are influenced by Chair-CEO diversity attributes. *International Review of Financial Analysis*, 9(4), 1-22.
20. Guilding, C., Warnken, J., Ardill, A., & Fredline, L. (2005). An agency theory perspective on the owner/manager relationship in tourism-based condominiums. *Tourism Management*, 26, 409-420
21. Hill, C.W., & Jones, T.M. (1992). Stakeholder-Agency Theory. *Journal of Management Studies*, 29(2), 131-154
22. Husni, T., Rahim, R. & Aprayuda, R. (2019). Cash compensation, corporate governance, ownership, and dividend policy on banking performance. *Advances in Economics, Business and Management Research*, 132.
23. Ibrahim, M. B., & Ahmed, A. Z. R. (2020). Effect of executive compensation and share ownership on financial performance of listed deposit money banks in Nigeria. *Journal of Accounting and Taxation*, 12(1), 1-11.
24. Isiaka, G. A. & Aruoren, E. E. (2025). Executive Compensation and Corporate Governance as Determinants of organizational performance in Nigeria. *IRASS Journal of Economics and Business Management*, 2(4), 12-19.
25. Kantudu, A. S. & Zik-rullahi, A. A. (2020). Value of listed DMBs in Nigeria: does share ownership moderate executive compensation and financial performance relationship?. *Journal of International Business Research*, 19(1), 1-10.
26. Kabiru, S. (2017). Executive compensation and financial performance of listed banks in Nigeria : :An empirical analysis. *Research of Accounting*, 2(3), 1–13.
27. Khanna, V. (2016). Determinants of CEO Compensation. *International Journal of Management Excellence*, 6(2), 679–683
28. Ku, Y.Y., & Yen, T.Y. (2016). Heterogeneous effect of financial leverage on corporate performance: a quartile regression analysis of Taiwanese companies. *Review of Pacific Basic Financial Markets and Policies*, 19(3), 165 0015-165 0033
29. Kwarbai J. D. & Akinpelu M. A. (2017). Human Capital Efficiency and Corporate Performance: The Nigerian Perspective. *The International Journal of Business & Management*, 4(3).
30. Lindström A, Svensson J (2016). Top management compensation and firm performance -A matter of context? Master's Thesis 30 credits, Department of Business Studies Uppsala University.
31. Mohammed, S., Ibrahim, A. U. & Maitala, F. (2023). Effect of executive compensation on financial performance of listed non-financial firms in Nigeria. *International Journal of Professional Business Review*, 8(5), 1-24.

32. NGX (2025). Nigerian Exchange Limited. Daily Official Lists of Listed Equities on the Conglomerates Segment on the last Trading Days of the Years from 2016 to 2025.
33. Nhon, H. T., Thong, B. Q., & Phuong, N. (2018). The impact of intellectual capital dimensions on Vietnamese information communication technology firm performance: A mediation analysis of human and social capital. *Academy of Strategic Management Journal*, 17(1), 1–15
34. Ntim, C. G., Lindop, S. Thomas, D. A., Abdou, H. & Opong, K. K. (2017). Executive pay and performance: The moderating effect of CEO power and governance structure. *The International Journal of Human Resource Management*, 30 (6). pp. 921-963
35. Obasan, K. A. (2021). Effect of compensation strategy on corporate performance: Evidence from Nigeria firms. *Research Journal of Finance and Accounting*, 3(7), 37-44.
36. Odiwo, W. O., Chukwuma, C. S., & Kifordu, A. A. (2016). The impact of corporate governance on the performance of manufacturing firms in Nigeria. *International Journal of Science and Research*, 5(9), 924-933.
37. Ohidoa, T. & Kolade, A. M. (2024). Executive compensation and firms' financial performance: analytical approach in Nigeria. *NIU Journal of Social Sciences*, 10(1): 283–295.
38. Omoregie, O. K., & Kelikume, I. (2016). Executive compensation and banking sector performance: Evidence from Nigeria. *Proceedings of the International Conference for Bankers and Academics 2016*, Dhaka, 264-277.
39. Omoregie, K. O. & Ige, P. A. (2025). Executive compensation and performance of Nigerian manufacturing firms: a panel vector autoregressive (PVAR) approach. *European Journal of Business and Management*, Vol.17, No.1, 34-48.
40. Opudu, D. O., Ogiriki, T. & Umbe, A. (2022). Firm financial performance and executive compensation in Nigeria. *International Journal of Business Systems and Economics*, 13(5), 212-224.
41. Otekunrin, A. O., Nwanji, T. I., Ajayi, S. A., Awonusi, F. D., Falaye, A. J., & Eluyela, D. F. (2018), Directors' Compensation and Performance of Selected Quoted Firms. *Journal of Social Sciences and Public Policy*, 10(2), 38-58
42. Otiko, U. N., Zubairu, A. D., Abdullahi, A. M., & Uchenna, C. O. (2025), Effect of board characteristics on market value of listed consumer goods firms in Nigeria. *International Journal of Finance and Accounting*, 10(6,5), 68-95
43. Oyaro, J, Memba, F., Oluoch, O. & Ondabu, I. T. (2025). Does executive compensation structure contribute to financial distress? Lessons from Nairobi securities exchange-listed non-financial firms. *International Academic Journal of Economics and Finance | Volume 5, Issue 1*, pp. 73-85.
44. Oyerogba, E.O., Riro, G.K., & Memba, F. (2016). The Perceived Relationship between Executive Compensation Package and Profitability of Listed Companies in Nigeria. *European Journal of Business, Economics and Accountancy*, 4(3), 11-22
45. Ozkan, N. (2011). CEO compensation and firm performance: An empirical investigation of UK panel data. *European Financial Management*, 17, 260-285.
46. Pulic, A. (2000). VAICTM-an accounting tool for IC management. *International Journal of Technology Management*, 20(5–8), 702–714.
47. Qiao L, Wang L (2016). An Empirical Study of Executive Compensation of State - owned Listed Companies on Corporate Financial Performance. *Advances in Computer Science Research* 59:233-237.
48. Okpo, S. A. & Eshiet, U. E. (2023). The impact of executive compensation packages on the financial performance of deposit money banks in Nigeria. *Journal of Allied Research in Management and Entrepreneurship*, 1(1), 19-29.
49. Sha'awa., M. Abbas U.I. and Faiza, M. (2023) Effect of executive compensation on financial performance of listed non-financial firms in Nigeria. *International Journal of Professional Business Review*. Vol. (8) 5, 88-101.
50. Saidu, K. S., Bello, M. M., & Jibril, R. S. (2017). Executive compensation and financial performance; industry sensitivity test. *Saudi Journal of Business and Management Studies*, 2(8), 732-736.
51. Sheikh, M. F., Bhutta, A. I., & Sultan, J. (2019). CEO compensation and unobserved firm performance in Pakistan. *Journal of Asian Finance, Economics and Business*, 6(3), 305–313. <https://doi.org/10.13106/jafeb.2019.vol6.no3.305>
52. Tosi, H. L., & Gomez-Mejia, L. R. (2018). In L. Tihanyi (Ed.), CEO compensation monitoring and firm performance. *Academy of Management Journal*, 37(4).

53. Tran, D. B., & Vo, D. H. (2018). Should bankers be concerned with intellectual capital? A study of the thai banking sector. *Journal of Intellectual Capital*, 19(5), 897–914. <https://doi.org/10.1108/JIC-12-2017-0185>
54. Tran, D. B., & Vo, D. H. (2020). Human capital efficiency and firm performance across sectors in an emerging market. *Cogent Business and Management*, 7, 1-15.
55. Ugbeh, F. O., Naburgi, M. M. & Musa, A. A. (2025). Effect of chief executive officer(CEO) characteristics on earnings uality of listed consumer goods firms in Nigeria. *Abuja Journal of Business and Management (AJBAM)*, 3(2), 129-145.
56. Wardoyo, D. U., & Utami, A. (2024). Effects of Intellectual Capital Disclosure, Return on Assets, on Firm Value, and Independent Board of Commissioner in Banking Sector: Agency Theory Perspective. *Journal of Law and Sustainable Development*, 12(1), e2531. <https://doi.org/10.55908/sdgs.v12i1.2531>.
57. Wolfe, J., & Aidar Sauaia, A.C. (2003). The Tobin q as a company performance indicator. *Developments in Business Simulation and Experiential Learning*, 30, 155-159.
58. Yahaya, O. A. (2025). CEO pay and firm performance. *Journal of Business and Management*, 9(5), 85-121.
59. Yahaya, O. A. (2025). The nexus between CEO incentives and earnings management. *International Business Review*, 18(6), 485–515
60. Yamina, A., & Mohamed, B. (2017). The impact of firm performance on executive compensation in France. *Mediterranean Journal of Social Sciences*, 8(2), 63-69.
61. Zik-Rullahi, Onmonya, Uthman and Ebire (2024). Executive compensation and financial performance of listed banks in Nigeria: moderating role of human capital. *Journal of Law and Sustainable Development*, 6, 1-26.