# Executive Compensation and Financial Performance: A Panel Data Study of Quoted Commercial Banks in Nigeria

## KOMOLAFE, Adebayo Joseph

Department of Banking and Finance Faculty of Management Sciences Rivers State University, Nkpolu-Oroworukwo, Port Harcourt, Nigeria

DOI: 10.56201/wjeds.v9.no2.2024.pg16.40

## Abstract

This study examined the effect of executive compensation and financial performance of quoted commercial banks in Nigeria. The ex post facto research design was employed and secondary data were sourced from the annual reports of 13 quoted commercial quoted on the Nigerian Exchange *Group between 2013 and 2022. The panel linear regression technique was adopted and data were* analysed using E-views to determine the effect of executive compensation on financial performance. Return on equity and earnings per share were modeled as the function of executive salaries, bonuses and executive equity holding. The study found that executive salary has positive and significant effect on return on equity, executive equity holding have positive but no significant effect while executive bonuses have negative and no significant effect on return on equity of the quoted commercial banks and that executive salaries have negative relationship with earnings per share, while executive equity holding and executive bonuses have positive relationship with earnings per share of the quoted commercial banks in Nigeria. We recommend that executive compensation packages should be based on performance to align compensation with company success. Performance-based compensation will inspire executives of insurance companies in Nigeria to deliver superior results and ensure the enhancement of financial performance of the quoted commercial banks.

**Keywords:** Executive Compensation, Financial Performance, Panel Data Study, Commercial Banks

## INTRODUCTION

Corporate financial performance is generally defined as a measure of the extent to which a firm uses its assets to run the business activities to revenues (Adegoroye Sunday, Soyinka & Ogunmola, 2017). It examines the overall financial health of a business over a given period of time and can be used to contract the performance of identical firms in similar industries or between industries in general (Atrill et al. 2009; (Adegoroye et al., 2017). The main source of data for determining firm financial performance is the financial statement, the product of accounting which consists of the balance sheet which shows the assets liabilities and equities of a business, the income statement that records the revenues, expenses and profits in a particular period, the cash flow statement which exhibits the sources and uses of ash in period, and the statement of changes in the owners' equity that represents the changes in owner's wealth. Firm financial performance is commonly reflected

in the calculation of financial ratios that show the link between numbers in the financial statement. The financial ratios may include the computation of the profitability, efficiency, liquidity, gearing, and investment of a particular firm. Moreover, firm financial performance generally may also be reflected in market-based (investor returns) and accounting-based (accounting returns) measures (Griffin & Mahon, 1997).

Examples of market-based indicators to measure firm financial performance are price per share and Tobin's Q which indicate the market value or the share of the firm as well as the financial prospect of the firm in the future. Additionally, what the shareholders have perceived from the returns distributed by the firm is also the driver of the share price. This price may lead to the market value of the firm. Alternatively, accounting-based measures, including profitability, efficiency, liquidity, gearing, and investment ratios, are calculated using the figures from the financial reports and may represent a firm's financial performance. According to Atrill et al. (2009), the ratios that may be utilized to calculate the firm's profitability and the return on assets (ROA), return on equity (ROE) and return on investments (ROI). These ratios expressed the success of a firm in generating profits or returns from the resources owned. In contrast, the market-based measure is believed to be more objective because it relines one market responses to particular decision made by a firm (Griffin & Mahon 1997). The choice of whether to use accounting or market-based calculations for measuring a firm's financial performance depends upon the specific aims of the research.

Executive compensation is a term that is straight forward and this has accounted for its simple definition (Adegoroye et al., 2017). Managerial compensation deals with the various manner and packages in which management is remunerated. The aim of executive compensation is to incentivize and reward appropriate performance and risk management behavior. A well-defined compensation policy will link the terms of performance and behavior to the company's strategy, continuity and long-term stable value creation. Given the strategic role of managers, it is also important that compensation levels are such as to attract, retain and motivate directors of the appropriate quality and caliber required (Bhatnagan & Trimm, 2011; Adegoroye et al., 2017). Thus, executive compensation packages have been viewed as important in mitigating the conflict of interest between managers and shareholders in corporations. It has been widely recognized that compensation packages could potentially play an important role in motivating top managers. A number of corporate governance codes recommend that a significant proportion of remuneration should be performance-related (Bhatnagan & Trimm, 2011). Broadly speaking, executive compensation can either be in cash or in terms of equity, though both can have several other derivatives.

However, in practice, recent events such as the stock market bubble, the series of corporate malfeasances and accounting scandals which drove policy markets to develop a set of anti-fraud/corporate government legislation reforms (notably the Sarbanes-Oxley Act of 2002), and the financial shocks and recession of 2008-2009, the confidence of policy makers and their constituents that management is in control and working for enhanced returns to investors has been shattered. The tenet that incentive driven executive compensation, especially CEO compensation, for public companies enhances shareholder wealth and thus societal wealth is viewed with now

greatly enhanced skepticism by the general public, the media, and policy makers (Adegoroye et al., 2017). Numerous demands for the reform of compensation practices of senior executives of public companies have been called for (Michaud & Gai, 2009). From the above, this study examined the relationship between executive compensation and financial performance of quoted firms in Nigeria

## LITERATURE REVIEW

# **Executive Compensation**

According to Shin, Lee and Joo (2009) executive compensation is composed of the financial compensation and other non-financial awards received by an executive from their firm for their service to the organization. It is typically a mixture of salary, bonuses, shares of or call options on the company stock, benefits and perquisites, ideally configured to take into account government regulation, tax law, the desires of the organization and the executive, and rewards for performance (Adegoroye et al., 2017). Executive compensation is a broad term for the financial compensation awarded to a firm's executives. Executive compensation packages are designed by a company's Board of Directors, typically by the compensation committee consisting of independent directors, with the purpose of incentivizing the executive team, who have a significant impact on company strategy, decision-making, and value creation as well as enhancing Executive Retention. Sun Xianging and Huamg (2013) define executive compensation as remuneration packages paid to senior leaders in business, most commonly the CEO. Executive compensation packages differ from employee remuneration both in scale and the benefits offered. Stock option form an integral part of most executive compensation packages, as well as a large basic salary, although many will offer a low basic salary and more favourable stock options to reduce the tax burden.

## **Executive Salaries**

Chief executive officers salaries are usually set on an annual basis. Moreover, it is a stylized fact that firm's size is associated with base salary (Murphy, 1999). In a static setting, during any particular year, salary's sensitivity to price movement is zero. Barring an implicit bonus scheme in which subsequent salary is adjusted according to reported earnings, it appears unlikely that there is salary-related explanation for earnings management (Adegoroye et al., 2017). As argued above, both logic and empirical evidence suggest that earnings management is a costly behavior, with the costs increasing in the degree of earnings management, e.g., due to increasing litigation risk. It follows that a manager on straight salary, who received at best a fixed benefit from earnings management, would have an incentive to reduce the extent of earnings management, and so reduce the costs.

## **Executive Bonus**

Firms reward managers' bonuses based on the current-year firm performance. Executives have incentives to either increase or decrease firm earnings, depending on the structure of a bonus plan whether earnings can be manipulated to trigger a raise in bonuses (Holthausen, Larcker, and Sloan, 1995). The payoff schemes of CEO bonuses in relation to firm earnings have the shape of a typical call spread curve (Adegoroye et al., 2017). More precisely, when earnings are beyond a certain upper threshold or below a lower bound where performance-based compensation is not possible, a manager would have incentives to make earnings-decreasing decisions. In contrast, when firm

earnings are in-between a range where bonuses are positively associated with firm earnings, a manager would implement earnings-increasing practices

# **Executive Stock holding**

This variable denotes restricted stocks currently owned by managers, who can choose to sell or continue to hold them. Contingent on the managers' stock holding preferences, they would make different earnings management decisions. Executives who prefer to sell restricted stocks are likely to implement earnings-increasing practices (i.e., under-reserve) so that the current firm value is maximized. By contrast, those who prefer to hold restricted stocks are anticipated to carry but earnings-decreasing policies (i.e., over-reserve) in order to shift favorable firm performance to the future when they decide to sell the restricted stocks (Eckles & Halek, 2010). Restricted Stock Held is defined as the value of the CEO's restricted stock held as a percentage of total compensation.

## **Financial Performance**

Financial performance consists of the financial health of an organization and is merely used to compare firms from one industry to the other (Musyoka, 2017). Financial performance is usually measured using financial ratios. Financial measures are influenced by non-financial measures (Santos & Brito, 2012). Performance can be divided into financial and non-financial performance. Eshna (2016) reported that financial performance is the "degree to which financial objectives are met that is assessing a firm's policies and operations in monetary terms. According to Yegon (2015) the three most important decisions in a firm are: investment, financing, and dividend decisions, and are all related to firm performance. Performance is, however, a difficult concept, in terms of definition and measurement. It has been defined as the end result of activity, and the appropriate measure selected to assess corporate performance is considered to depend on the type of organization to be evaluated and the objectives to be achieved through that evaluation (Hunger and Wheelan, 1997).

## **Return on equity**

Return on equity (ROE) is a measure of the profitability of a business in relation to equity. ROE ratio essentially measures the rate of return that the owners of the common stock of a company receive on their shareholdings. It signifies how good the company is in generating returns on the investment it received from its shareholders. ROE is one of the all-time favorites and perhaps the most widely used overall measure of corporate financial performance (Rappaport, 1986; Lucky, 2018). The ultimate purpose of any profit-seeking organization is to create wealth for its owners.

According to Black et al., (2001) shareholder value is created when the equity returns of a company exceed the cost of that equity. It can also be described as the present value of all future cash flows, less the cost of debt. ROE is calculated by taking the profit after tax and preference dividends of a given year and dividing it by the book value of equity (ordinary shares) at the beginning of the year. Modern-day businesses are not run exclusively for the interest of shareholders alone but in the interest of all stakeholders interested in the organization. Thus, firms in pursuant of their economic values should as well recognize in their annual reports by disclosing the social and environmental impact of their business activity to the host communities to sustain the environment,

promote harmonious relationships among the people, preserve the corporate image of the organization as well as build confidence in the society. Against this backdrop, the study aims to ascertain the effect of environmental accounting disclosures on the Return on Equity of selected manufacturing firms in Nigeria.

## **Earnings per Share**

Earnings per share are a ratio that measure earnings in relation to every share on issue. This is measured by dividing the profit before interest and taxes with the outstanding number of shares of the firm. This indicates how much each one share of the firm will earn from the yearly proceed. The earnings for every share represent shareholders slice of the pie. As earnings go up over time, the value of that piece of the firm becomes more valuable and this is why the price will be bid Whilst there are not many truisms when it comes to share investment, one is that if earnings rise consistently over periods of time. Apparently, issue of shares that increases the number of outstanding share dilutes the equity owners' residual value. Tze-Sam and Heng (2011) provided empirical investigation using EPS as a proxy for corporate performance to establish its relationship with financial structure. The measure is derived thus;

EPS = <u>Profit before Interest and Tax</u> No of Outstanding Shares

1

## **Theoretical Review**

The study was anchored on agency theory which is the core of any research trying to determine whether a correlation exists between performance and executives' pay. Theory defines how to best categorize relationships in which one party (the principal, defined as the shareholder) determines the work, which another party (the agent, defined as the Chief Executive Officer) undertakes (Eisenhardt, 1985). Amongst other concepts, the theory argues that under difficult monitoring conditions, such as imperfect information and uncertainty, an agency problem may arise in the form of moral hazard. Moral Hazard problems are common in labour contracting issues. It is the condition under which the principals cannot be sure if the agent has put forth his best effort. Moral Hazard problems can be present any time two parties come into a risk sharing agreement with one another, and where their privately taken actions affect the profitability of the total outcome. If this situation were to arise, optimal risk sharing is generally excluded since it will not yield the proper incentives for making the correct decision. Moral hazard problems can take the shape of compensation structure. Since the executive's compensation will be the same regardless of how much or how little the shareholder will benefit from his work, a fix salary might create a disincentive for taking value maximizing risks and putting forth his best effort. In order to resolve this situation, there needs to be a way to substitute some of the risk sharing where benefits of incentives can be achieved. The action, which is optimal for the agent, will depend on the extent of risk sharing between the principal and the agent (Holstrom, 1979). Incentive contracts can yield the proper stimuli for risk sharing. To entice the top executive to perform to the best of their ability, theory on moral hazard problem suggest replacing fixed wages with compensation that is tied to the profits of the company. The provision of ownership right reduces the incentive for executive's moral hazard since it makes their compensation dependent on their performance (Jensen, 1983).

# **Empirical Review**

Adegoroye et al., (2017) theoretically examined the relationship between executive compensation and firm performance among Nigeria firms. This conceptual paper examines the issue using a library-based largely on the review of extant literature. The findings from majority of the studies show that the executive compensation has a significant effect on firm performance. However, we observed several gaps based on the literature review conducted. For studies conducted in developed economies we find that a clear gap exists in terms of the sensitivity of empirical findings for the relationship between executive compensation and firm performance to the type of compensation that is used. Where cash or equity is used, the findings appear to vary. For studies conducted in developing economies, we notice that, in most of these studies only accounting measures of firm performance are used ignoring market measures such as stock price and the Tobin Q measure. Again, it appears that most of the studies are based on cash compensation without much consideration to equity compensation schemes. For Nigeria, it appears that not much has been done empirically in these areas and just as in the case of studies in developing countries, only accounting measures of firm performance are used ignoring market measures such as stock price and the Tobin Q measure. Finally, only cash compensation is examined while equity compensations are ignored by studies in Nigeria. The study concludes that there is the need for further studies to address this gap

Campbell (2015) examined the complex relationship between compensation levels of the Top management team (TMT) and firm performance. A core objective of the study was the comparison of executive compensation and company performance for United States based companies. Data was collected from a random sample of the 2013 fortune 500 list of largest United States based companies. For the study, the value of the options granted was determined using the Modified Black Scholes method. The statistical procedure employed in the study was ordinary least squares (OLS) regression analysis. OLS regression analysis for the study utilized SPSS 22.0. Findings from the study revealed that a significant relationship exists between CEO compensation and the accounting based measure of performance which accounted for 11.4% of the variance observed in the accounting based measure of performance. The results also showed that levels of Vice President Compensation have a stronger direct relationship with firm performance than CEO compensation.

Bhatnagan and Trimm (2011) explored the Agency managerial power theories to explain the relationship among the various components of executive compensation, firm performance and unsystematic risk in the US financial sector. Institutions in the financial sector listed on the NASDAQ that have been in existence from the prefinancial crisis period January 03, 2006 to the post financial crisis December 27, 2009 are examined. We find that the Agency theory does not fully explain the behavior of executives and their risk appetite. Managerial power theory fares better in this regard, as managers are focused mostly on their base salary. The date analysis shows that stock options are not significantly influenced by unsystematic risk; instead the base salary of executives has been significantly influenced by market risk and firm performance.

Nulla (2014) investigated the effect of CEO roles with accounting performance towards CEO compensation in the New York Stock Exchange (NYSE) companies from the periods 2005 to 2010. This study selected one hundred and twenty companies through stratified sampling method. This study demanded the characteristics of numerical and objectivity as such the quantitative research methodology was applied. The research question for this study was: is there a relationship between CEO compensation, CEO & chairman dual role, and CEO role? It was found that, there was relationship between CEO salary, CEO bonus, CEO total commendation, and accounting firm performance, under both roles.

Kato and Long (2005) provided evidence on how executive compensation relates to firm performance in listed firms in China. Using comprehensive financial and accounting data on China's listed firms from 1998 to 2002, augmented by unique data on executive compensation and ownership structure, they find for the first time statistically significant sensitivities and elasticity's of annual cash compensation (salary and bonus) for top executives' compensation and that Chinese executives are penalized for making negative profit although they are neither penalized for declining profit nor rewarded for rising insofar as it is positive.

Ozkan (2011) examined the link between CEO pay and performance employing a data set of 390 UK nonfinancial firms from the FTSE All Share Index for the periods 1999-2005. He included cash and equity-based components of CEO compensation in his analysis. The results indicated a positive and significant link between CEO cash compensation and performance; however, the link between total compensation and performance was positive but not significant. The findings from the study also suggested that larger firms pay their CEOs higher compensation, which one can interpret as reflecting their demand for higher quality CEO talent. Further, he noted that firms with larger board size pay their CEOs higher level of total compensation and moreover, proportion of non-executive directors on board do not have a significant impact on CEO cash compensation, while non-executive directors share ownership has a significant impact suggesting that ownership can provide incentives for non-executive directors to be more active in monitoring for CEO compensation packages.

Xiang Li (2010) investigated the relationship among corporate governance mechanism, firm performance, and executive compensation within Chinese publicly listed firms and indicated a dysfunctional corporate governance system in China, which cannot bring improved firm performance but grant executives high compensations. So far as the political connections are concerned, results showed that they deteriorate corporate governance mechanism, but do not result in inferior firm performance. Conyon and He (2011) investigated executive compensation and corporate governance in China's public trade firms and found that executive compensation is positively correlated to firm performance. The study showed that executive pay and CEO incentives are lower in State controlled firms and firms with concentrated ownership structures. The study also found that firms with more independent directors on the board have a higher payfor performance link.

Doucouliagos, Askary and Haman (2008) in a paper explored the relationship between directors' and Chief Executive Officer's pay and performance within Australian banking, using panel data for the 1992-2005 periods. Several earnings models are estimated, using different dependent variables, alternate measures of performance and different estimation techniques. The result indicates an absence of a contemporaneous relationship between directors' pay and firm performance, and no association with prior year. However, there is a more distant pay-performance relationship, with total directors' pay having a robust positive association with earnings per share lagged two years, as well as with ROE lagged two years. The pay performance association is stronger and more direct for CEO remuneration than it is for total directors' remuneration. Gregg, Jewell and Tonks (2011) examined the pay-performance relationship between executive cash compensation (including bonuses) and company performance for a sample of large UK companies, focusing particularly on the financial services industry. The sample utilized for the study considered of 415 companies that were all constituents of the FTSE 350 stock market index over the periods January 1994 to December 2006. The model of the study was estimated using fixed effect regression. Surprisingly, they found that although total board pay and the pay-performance sensitivity between the financial sector and other industries.

Sigler (2011) examined the relationship of CEO pay and company performance for 280 firms listed on the New Stock Exchange for period from 2006 through 2009. The time frame of the study is a period after the adoption of the Sarbanes Oxley Act and after the SEC approval of the corporate governance rules affecting executives' pay for New York Stock Exchange companies. Findings from the study revealed that there is a positive and significant relationship between total CEO compensation and company performance measured by return on equity. The size of the firm appears to be the most significant factor in determining the level of total CEO compensation, according to the results, and the tenure of the Chief Executive Office is another significant variable.

Hassaen (2015) examined the effect of CEO compensation on firm performance of French family firm. To investigate the link between executive pay and firm performance, they utilized multiple regression method over a period of four years (2007- 2010). Findings from their study revealed that French family companies provide excessive compensation compared to their non-family counterpart, suggesting that families are likely to extract private benefits at the expense of minority shareholders. The findings also show that excess remuneration paid to executives has a negative impact on financial performance. The result confirms the preceding one and suggests that CEO compensation is used by families as a tunneling mechanism that exacerbates agency costs.

Denirer and Yuan (2013) carried out a study to investigate the relationship between executive compensation structure and firm performance in the US restaurant industry. Using executive compensation data for public trade restaurant firms for the periods 1999 to 2010, their results suggest that compensation in the form of bonuses and non-equity affect restaurant firm performance positively. Findings from the study also revealed that compensation in the form of salary affects restaurant firm performance negatively. Findings of this study suggest that restaurant firms should use salary with discretion and use bonuses and deferred pay to increase firm performance. Sun, Wei and Huang (2013) examined the relationship between CEO compensation and firm performance proxied by efficiency estimated from data envelopment analysis (DEA) of

the US property-Liability (P&L) insurance industry. The study was conducted in two stages. First, they applied DEA models to calculate efficiency scores. In the second stage a translog model was used to correlate the level and structure of CEO compensation and the efficiency for the sample P&L insurance over the period of 2000 to 2006. Findings from the study revealed that firm efficiency is positively and significantly associated with total CEO compensation. While efficiency is associated with CEO cash compensation, cost efficiency is associated with incentive compensation.

Jaafar, Wahab and James (2012) examined relationship between director remuneration and performance in Malaysia family firms. The proxies of director remuneration include fees, salary, bonuses and benefits of kin. The proxy for family firm is a dummy variable that is one (1) if the firm is a family firm and zero (0) is a non-family firm. The dependent variable (performance) is measured by ROA and ROE. A panel analysis of 537 firms from 2007 and 2009 finds that the relationship between director remuneration and performance is significantly positive. This suggests that the remuneration drive board motivation to enhance performance. Ismail, Yabai and Hahn (2014) investigated the relationship between CEO pay and firm performance (return on asset, return on equity and profit margin) of 100 companies from the consumer product sector in Malaysia listed in Bursa Malaysia from 2006 to 2010. The correlations and regressions among the sub-variables of the firm performance and the CEO pay were found to be consistently positive ranging from weak positive to the strong positive.

Usman, Akhter and Akhtar (2015) carried out a study aimed at investigating the influence of board effectiveness and firm performance on CEO compensation within the context of developing economy of Islamic Republic of Pakistan. The study uses Partial Least Square (PLS) based Structural Equation Modeling (SEM) techniques to draw the inference using PLS Graph Version 3.0. It uses Karachi Stock Exchange (KSE) 100 index companies as a sample for the period of five years (2007-2011). Before analyzing the structural model, the validity and reliability of the model is confirmed through bootstrapping technique and variance inflationary factor respectively. The structural model results revealed that board effectiveness has negative influence on CEO compensation. Opposite to agency theory and current studies from developed countries, they found a negative association between the firm performance (firm value and firm profitability) and CEO compensation. These results are due to different business environment of Pakistan and poor corporate governance structure.

Opudu et al. (2022) examined firm financial performance and executive compensation in Nigeria. The study made use of secondary data which was sourced from the annual report and accounts of ten (10) listed sampled companies between 2012 and 2017. Descriptive statistics and ordinary least square regression method were used to analyse the data collected. Findings revealed that financial performance is positively and significantly linked with executive compensation of the sampled listed firms in Nigeria. Hence, it was recommended that short term and long term performance of the firm should determine the compensation of executives which will ensure the sustenance of shareholders wealth. Similarly, in a study conducted by Sajnóg and Rogozińska-Pawełczyk (2022) to determine the relationship between executive compensation and financial performance of Polish

listed companies from the corporate governance perspective from 2009 to 2018, it was discovered that executive compensation is influenced by financial performance variables of the sampled companies.

William (2020) examined the effect of bank performance, and CEO ethics on compensation in Nigeria from 2006 to 2016. The study employed alternative measures of bank performance and a self-determined ethics index to analyse the determinants of chief executive officers' pay. It was discovered that bank performance does not influence CEO compensation while CEO ethics negatively influenced CEO compensation. Akinwunmi (2020) investigated the determinants of CEO compensation in Nigeria using a sample of 50 listed companies in Nigeria from 2016 to 2018. Linear regression was used to estimate the variables of the study. It was discovered that performance of companies is not a determinant of CEO compensation among the studied firms.

Appah, et al. (2020) investigated directors' compensation and financial performance of deposit money banks in Nigeria using ex post facto research design. Secondary data were sourced from the annual financial statements of the sampled banks from 2008 to 2017. The multiple regression analysis revealed that directors' compensation has a positive insignificant effect on the financial performance of deposit money banks in Nigeria. Ibrahim and Ahmed (2020) studied the effect of executive compensation and share ownership on the financial performance of listed deposit money banks in Nigeria using robust ordinary least square regression technique for estimation and data from the sampled banks analysed via Stata 13 for the period 2007 to 2018. It was discovered that executive compensation has positive significant effect on the performance of banks in Nigeria. Omotola and Akrawah (2019) examined compensation practices and financial performance of selected quoted companies in Nigeria using panel survey research design. Secondary data were collected from 62 quoted firms for the period 2011 to 2016. The study also adopted multiple regression analysis using panel data to test the hypothesis. Findings from the study indicate that CEO compensation has negative insignificant influence on organisational performance, while directors' compensation has positive insignificant influence on organisational performance. Ibeawuchi and Onuora (2021) investigated executive compensation and performance of quoted consumer goods companies in Nigeria using secondary data obtained from the accounting reports of the selected consumer goods companies from 2011 to 2018. An ex-post facto research design was adopted for the study and the hypotheses was tested using the Pearson correlation method of analysis. It was discovered that CEO salary has negative insignificant effect on the performance of quoted consumer goods in Nigeria, while board of directors' cash compensation has positive insignificant effect on the performance of quoted consumer goods in Nigeria.

Solomon, Abdulraman and Leah (2022) examined the effect of corporate performance on executive compensation of listed insurance companies in Nigeria. In achieving this objective, the ex post facto research design was employed and secondary data were sourced from the annual reports of ten insurance companies out of the 23 listed on the Nigerian Exchange Group between 2011 and 2020. The panel linear regression technique was adopted and data were analysed using E-views to determine the effect of the independent variables (return on assets, return on equity,

earnings per share) on the dependent variable (executive compensation). Findings from the study indicate that return on assets and earnings per share have no significant effect on executive compensation of listed insurance companies in Nigeria. However, it was discovered that return on equity has a significant effect on executive compensation of listed insurance companies in Nigeria. The model was also discovered to be positive and significant at 5% level of significance. Therefore, it is recommended that the compensation packages of the executive of insurance firms should be based on performance to align compensation with company success. Performance-based compensation will inspire executives of insurance companies in Nigeria to deliver superior results and ensure the enhancement of shareholders' value as well as business sustainability.

Erick, Kefah and Nyaoga (2014) assessed the effect of executive compensation on the financial performance of insurance companies in Kenya. The study considered functional form relationship between the level of executive remuneration and key performance ratios by using a regression model that establishes the relationship between pay and financial performance. The result show that there is a non-significant relationship between executive compensation and financial performance, P-Value>0.05. The negative correlations suggest the capping of executive compensation to maximize shareholders' returns. This advocates that key performance ratios are not key considerations in determining executive compensation among the insurance companies in Kenya. Hence there is need to sensitize executives to align their payment to accounting performance measures because they are directly linked to shareholders' wealth maximization.

Aduda (2011) examined the relationship between executive compensation and firm performance among commercial banks listed at the National Stock Exchange. The study considered functional form relationship between the level of executive remuneration and accounting performance measures by suiting a regress model that relates pays and performance. He found out that accounting measures of performance are not key consideration in determining executive compensation among the banks in Kenya and that size is a key criterion in determining executive compensation as it was significantly but negatively relates to compensation. The negative correlation suggests the capping of executive compensation to ensure maximization of returns to shareholders.

Ramadan (2013) carried out a study to test the pay-performance relation for the Jordanian manufacturing firms listed on the Amman Stock Exchange during the periods 2000-2011. Using two regression methods; the ordinary Least Square Method, and the Fixed Effect Method, three models were tested. All three models were tested to lead to a conclusion that there is a positive and significant impact of the CEO remuneration on the Jordanian manufacturing firm's performance. Another finding of the study revealed that due to specific characteristics of each of the companies, the impact of the remuneration varies among the Jordanian Industrial Firms in the magnitude of the impact, and consistent in the direction of the impact. These findings are compatible with the say that the CEO remuneration has a significant role in mitigating the agency problem by granting reasons for CEOs to perform their tasks to the magnification of owner's wealth, and the remuneration should reflect and suit firm's performance.

Krauter and Ferreira de Sousa (2013) carried out a survey to investigate the relationship between executive compensation and the financial performance of companies. The survey data consisted of a secondary and non-probability sample of 44 Brazilian industrial companies. In order to operationalize the independent remuneration variable, the authors used average monthly salary, average variable salary, and three indices that were created for this survey: benefits, career, and development. These indices measure the access to benefits, mechanisms for stimulating and supporting, careers, and mechanisms to encourage education and professional development that companies offer to their directors, vice president, and Chief Executive Officer (CEOs), who are referred to in the paper by the term "executive". The remuneration data are from fiscal year 2006. In order to operationalize the finance performance variable, two accounting indicators were used: sales growth and Return on Equity (ROE) for fiscal years 2006 and 2007. The results of a multiple regression analysis do not support the hypothesis that there is a positive and significant relationship between executive compensation and corporate financial performance.

Scholtz and Smit (2012) examined the relationship between short-term executive compensation and company performance for a sample of companies listed on the Alternative Exchange in South Africa between 2003 and 2010. The financial sample consisted of 58 companies, but only data available on McGregor BFA for the companies in the sample were used in the regression analysis. Evidence is provided that there is a strong relationship between executive remuneration and some company performance variables, such as total assets, turnover and share price. The corporate governance measures and disclosure requirements application to executive remuneration were also examined.

Obasan (2012) carried out a study that tried to link compensation with performance using selected firms is Nigeria as a case study. His study specifically covered three conglomerates in Nigeria. The choice of this case study was not unconnected with the fact that these companies are among the largest employers of labour in the manufacturing industry in Nigeria. A total number of 150 questionnaires (50 for each company) were considered. The questionnaires were distributed among the staff and management of the selected business units. The random sampling techniques were employed in the distribution of the questionnaire. Using the cross-sectional data analysis, the study found that compensation strategy has the potential beneficial effects of enhancing workers' productivity and by extension improving the overall organizational performance. Therefore, the significance of compensation cannot be overemphasized in an organization and is in fact a variable option for attracting, retaining, and motivating employees for improved organizational productivity.

Ayodele (2012) examined the effect of executive compensation structure and ownership on firm performance. A simple random sampling technique was used to sample 240 personnel from cross-section of banks in Lagos State, Nigeria. A structured questionnaire consisting of 25 items as instrument for data collection was employed. The data were analyzed using chi-square technique. The results of the analysis revealed that there is a significant relationship between management ownership and bank's market value. However, the finding shows that executive compensation structure do not affects bank's market value. The paper also revealed that among larger commercial

banks, size is a key criterion in determining executive compensation as it is significantly but negatively related to compensation.

Idemobi, Onyeizugbe and Akpunonu (2011) examined the extent to which compensation management can be used as a tool for improving organizational performance in a typical public sector organization like the Anambra State of Nigeria Civil Service. Guided by the Vroom's expectancy theory of motivation, this study seek to ascertain if financial compensation has a significant relationship with employee performance in the public service using Anambra State Civil Service as a reference. In pursuance of the objective of the study, the descriptive survey design was adopted. Pearson's product Moment Correlation was used for data analysis and Z-test was also used to test the significance of the coefficient of correlation at 5% level of significance. It was found that financial compensation for staff members in the public service do not have a significant effect on their performance and that financial compensation received are not commensurate with staff efforts. Olalekan and Bodunde (2015) examined the impact of CEO pay on performance of 11 selected Nigerian quoted banks between 2005 and 2012, using a dynamic Generalized Method of Moments (GMM). The study reveals that the CEO pay exerts significant but negative influence on bank performance in Nigeria. This study therefore concludes that rather than being an important corporate governance mechanism to align the interests of CEO with those of shareholders, the CEO pay of Nigerian quoted banks is indeed part of agency problem in the industry.

#### **METHODOLOGY**

The study employed the ex-post factor research design which entails the utilization of historical data to forecast future trends employing econometric or analytical techniques. The use of ex-post facto design enables researchers to analyse past trends and explain the relationship between the dependent and independent variables (Davies & Lucky, 2017, Anyamaobi & Lucky, 2017). The population of the study covers 24 reporting commercial banks to Central Bank of Nigeria. However, the sample size covered 13 quoted commercial banks in Nigeria existing within the time scope of this study. Panel data used in the study were collected from annual reports and various databases of the banks for financial statement for the period 2013 to 2022.

## **Data Analysis Method**

The method of data analysis to be used in this study was the panel data multiple linear regressions using Ordinary Least Square (OLS) method. Moreover, in order to undertake a statistical evaluation of our analytical model, so as to determine the reliability of the results obtained and the coefficient of correlation (r) of the regression, the coefficient of determination  $(r^2)$ , the student T-test and F-test will be employed.

## **Model Specification**

The study adopts the panel data method of data analyses which involve the fixed effect, the random effect and the Hausman Test.

#### **Pooled Effect Model**

$$ROE = f(ESS, EEH, EBS)$$
 (2)

$$ROE = f(ESS, EEH, EBS)$$
(3)

$$ROE_{it} = f(\beta_1 ESS + \beta_2 EEH + \beta_3 EBS + \varepsilon_{it})$$
(4)

$$EPS_{ii} = f(\beta_1 ESS + \beta_2 EEH + \beta_3 EBS + \varepsilon_{ii})$$
(5)

#### **Fixed Effects**

The fixed effects focus on whether there are differences by using a fixed intercept for each of the different cross-sectional structures. If we assumed that the dummy variable for a conglomerate company is 1 or 0, then  $D_i$ , which is the dummy variable for firm i, can be expressed as:

$$D_{i} = \begin{cases} l, i-1 \\ 0, \text{ otherwise} \end{cases} D_{2} = \begin{cases} l, i-2 \\ 0, \text{ otherwise} \end{cases} \dots D_{N} = \begin{cases} l, i-1 \\ 0, \text{ otherwise} \end{cases} \dots (6)$$

The regression of total samples can be expressed as:<sup>1</sup>

$$Y_{it} = \sum_{i=1}^{N} \beta_{oi} D_i + \beta_i D_s + \beta_2 D_{ma} + \beta_3 s_1 + \beta_{oi} D_4 s_2 + \varepsilon_{it}$$
 (7)

The dummy variables are expressed as follows: if j = i, then Di = 1; otherwise Di = 0.2

To further investigate the fraud effect, Adebayo (2012) analysed whether the independent variables affect the dependent variable, this regress the effect of the independent variables on the dependent variables.

$$ROE_{it} = f(\beta_1 ESS + \beta_2 EEH + \beta_3 EBS + \varepsilon_{it})$$
(8)

$$EPS_{ii} = f(\beta_1 ESS + \beta_2 EEH + \beta_3 EBS + \varepsilon_{ii})$$
(9)

Because the fixed effects account for both cross-sectional and time-series data, the increased covariance caused by individual-firms differences is eliminated, thereby increasing estimation-result efficiency.

#### **Random Effects**

Random effects focus on the relationship with the study sample as a whole; thus, the samples are randomly selected, as opposed to using the entire population. The total sample regression (a function of the random effect) can be expressed as:

$$ROE_{it} = \sum_{i=1}^{N} \beta_0 + f(ESS + \beta_2 EEH + \beta_3 EBS + \varepsilon_{it} ...$$

$$EPS_{it} = \sum_{i=1}^{N} \beta_0 + f(ESS + \beta_2 EEH + \beta_3 EBS + \varepsilon_{it} ...$$

If this is represented with random variables, then  $\beta_{oj} = \overline{\beta}_0 + \mu_j$ , which indicates that the difference occurs randomly, and the expectation value of  $\beta_{oi}$  is  $\overline{\beta}_0^5$ .....(12)

Where

ROE = Return on Equity

EPS = Earnings per Share

ESS = Executive salaries

EEH = Executive equity Holding

EBS = Executive bonuses

**A-Priori Expectations of the Variables** 

$$ESS_{it} < 0$$
 and  $EBS_{it} > 0$ 

The model had equity value of the commercial banks as the dependent variables, from the model; the independent variables are expected to have a positive effect on the dependents variable.

# **Hausman Test**

The Hausman test YairMundlak (1978) is the most commonly used method for evaluating fixed and random effects. If variables are statistically correlated, then the fixed-effects estimation is consistent and efficient, whereas the random- effects estimation is inconsistent, and the fixed-effects model should be adopted. Conversely, if the variables are statistically uncorrelated, then the random-effects estimation is consistent and efficient, whereas the fixed-effects estimation is consistent but inefficient, and the random-effects model should be adopted.

## **Pooled Regression**

In testing pooled regression by using ordinary least squares (OLS) first as it is the simplest to do with panel data. We stipulated that the error term should be independently and normally distributed with zero mean and constant variance and more importantly must not correlated with the independent variables pooled OLS linear regression is given as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{4it} + \beta_4 X_{5it} + U_{it}$$

Where  $Y_{it}$  is the dependent variable;  $\beta_0$  is a constant term:  $X_1$ , to  $X_4$ , are the independent variables;  $\beta_1$  to  $\beta_4$  are slope parameters: i...n refer to the cross-sectional units and t is the time period.

## **Redundant Fixed Effect Test**

the study used redundant fixed effect test, also called likelihood ratio test, to test whether the data can simply be pooled and estimated using a standard ordinary least squares regression model or affixed effects panel regression approach can be employed. The fixed effects model is simply a linear regression model in which the intercept terms vary over the individual units' i.e.

$$y_{t_t} = \alpha_j + x_{it}^{-1} \beta + \varepsilon_{it} \quad \varepsilon_{it} \approx HD(0.\sigma^2)$$

Where it is usually assumed that all  $x_{it}$  are independent of all  $\varepsilon_{it}$  it can write this in the usual regression framework by including a dummy variable for each unit in the model. That is

$$y_{t_t} = \sum_{j=1}^{N} \alpha_j d_{ij} + x_{ij} \beta + \varepsilon_{it} \quad \varepsilon_{it}$$
15

Where  $d_{ij} = 1$  if i = j and 0 elsewhere. We thus have a set of N. dummy variables in the model. The parameters  $\alpha_1, \ldots, \alpha_N$  and  $\beta$  can be estimated by ordinary least squares.

## **The Random Effect Model**

It is commonly assumed in regression analysis that all factors that affect the dependent variable, but that have not been included as repressors, can be appropriately summarized by a random error

term. In our case, this leads to the assumption that they  $\alpha_t$  are random factors, independently and identically distributed over individuals. Thus we write the random effects model as

$$y_{it} = \mu + x_{it}\beta + x_{it}\beta + \alpha_i + \varepsilon_{it}$$

Where  $\alpha_t + \varepsilon_{it}$  is treated as an error term consisting of two components: an individual specific component, which does not vary over time, and a remainder component, which is assumed to be uncorrelated over time. That is, all correlation of the error terms over time is attributed to the

individual effects  $\alpha_{it}$ . It is assumed that  $\alpha_{it}$  and  $\varepsilon_{it}$  are mutually independent and independent of  $\alpha_{it}$  (for all i and s). This implies that the OLS estimator for  $\alpha_{it}$  from (10) is unbiased and consistent.

## **RESULTS AND DISCUSSION OF FINDINGS**

Table 1: Short Run Regression Results: Executive Compensation and Return On Equity

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ESS	0.007426	0.006782	0.0041	
EEH	0.000120	0.000119	1.009347	0.3134
EBS	-0.004144	0.007246	-0.571921	0.5677
С	5.647117	0.184233	30.65200	0.0000
	Effects Specific	eation		
Cross-section fixed (dummy	variables)			
R-squared	0.809650	Mean dependent	var	5.767034
Adjusted R-squared	0.787457	S.D. dependent va	1.361233	
S.E. of regression	0.627561	Akaike info criter	2.006185	
Sum squared resid	175.6492	Schwarz criterion	2.453616	
Log likelihood	-447.5431	Hannan-Quinn cr	2.181771	
F-statistic	36.48185	Durbin-Watson st	at	0.865068
Prob(F-statistic)	0.000000			
Correlated Random Effects -	Hausman Test			
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		29.985285	3	0.0000

Source: computed from E-view 9.0

## **Analysis of Results**

Given that the Chi-Sq. Probability is greater than 0.05, being 0.0000, the fixed effect model is adopted. The table also shows comparable differences between fixed and random effect models in the results. As regards the model summary, the R<sup>2</sup> in the fixed effects model is 0.787457 implying that executive compensation accounts for approximately 78.7 % variation in return on equity of the quoted commercial banks in Nigeria. The adjusted R<sup>2</sup> also shows 0.52 implying that irrespective of the number of endogenous variables, executive compensation would not account for more than 21.3 percent variation in return on equity of the quoted commercial banks.

The Durbin Watson is 0.865068 as computed from the fixed effect results at 5% level of significance with four explanatory variables and 130 observations. This is greater than the calculated DW for dL and du which are 0.861 and 1.562 respectively. Besides, given that it revolves around 2, it is permissible; therefore, there is no evidence of serial correlation. Furthermore, the movement between the endogenous and exogenous variables as seen from the coefficients shows that the constant of the model is 5.647117, implying that if the endogenous variables are held constant or unchanged, the exogenous variable – return on equity will rise by 5.6 units periodically. The coefficient of the parameters or endogenous variables showed that executive salary has positive and significant effect on return on equity, executive equity holding have positive but no significant effect while executive bonuses have negative and no significant effect on return on equity of the quoted commercial banks.

Table 2: Short Run Regression Results: Executive Compensation and Earnings per Share

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ESS	-7.296405	0.007151	-3.010200	0.0009
EEH	0.002767	0.007651	0.361627	0.7178
EBS	4.779205	0.000126	2.379527	0.0045
C	5.052701	0.281776	17.93164	0.0000
	Effects Specif	rication		
	_		S.D.	Rho
Cross-section random			1.442182	0.8251
Idiosyncratic random			0.664055	0.1749
	Weighted Sta	ntistics		
R-squared	0.701030	Mean dependent var		0.744498
Adjusted R-squared	0.605012	S.D. dependent var		0.681001
S.E. of regression	0.682705	Sum squared resid		231.1788
F-statistic	9.170478	<b>Durbin-Watson stat</b>		1.287145
Prob(F-statistic)	0.000017			
	Unweighted S	tatistics		
R-squared	0.002878	Mean dependent var		5.166960
Sum squared resid	1836.004	<b>Durbin-Watson stat</b>		0.161699
Correlated Random Effects	- Hausman Test			
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		3.251896	3	0.2836

Source: computed from E-view 9.0

## **Analysis of Results**

Given that the Chi-Sq. Probability is greater than 0.05, being 0.2836, the random effect model is adopted. The table also shows comparable differences between fixed and random effect models in the results, as the results. As regards the model summary, the R<sup>2</sup> in the random effects model is 0.605012 implying that executive compensation accounts for approximately 60.5% variation in earnings per share of the quoted commercial banks in Nigeria. The adjusted R<sup>2</sup> also shows 39.5 implying that irrespective of the number of endogenous variables, executive compensation would not account for more than 39.5% variation in market value of the selected companies.

The Durbin Watson is 0.161699 as computed from the random effect results at 5% level of significance with four explanatory variables and 130 observations. This is greater than the calculated DW for dL and du which are 0.861 and 1.562 respectively. Besides, given that it revolves around 2, it is permissible; therefore, there is no evidence of serial correlation.

Furthermore, the movement between the endogenous and exogenous variables as seen from the coefficients shows that the constant of the model is 5.052701, implying that if the endogenous variables are held constant or unchanged, the exogenous variable – equity value will rise by 5.0 units periodically. The coefficient of the parameters or endogenous variables showed that executive salaries have negative relationship with earnings per share, while executive equity holding and executive bonuses have positive relationship with earnings per share of the quoted commercial banks in Nigeria. The magnitude is such that, a unit increase in EEH will result in a

0.002767 and 4.779205 units additions to earnings per share or vice versa, while on the other hand, a unit rise in ESS will lead to -7.296405 decrease in the earnings per share of the quoted commercial banks in Nigeria

The severity of relationship shows that executive salaries have significant relationship with earnings per share given that their p-values are less than 0.05, being, 0.0045, 0.0009 and 0.7178 respectively; while on the other hand, executive equity salaries and executive bonuses are seen to have significant relationship with earnings per share of the quoted commercial banks Comprehensively, the probability of the F-statistics is 0.000017, being less than 0.05; therefore executive compensation has a statistically significant relationship with the earnings per share of the quoted commercial banks in Nigeria. Empirically, the findings are in line with the findings of Zou, et al (2015), Ogunyemi, et al (2019), Alves, et al (2016) the study provides empirical evidence of positive and significant relationship between executive salaries and market value. This implies that improved and increased salaries would increase return on equity of the quoted commercial banks. The reason firms this is not far-fetched, commensurate salaries would prompt top executives to secure their jobs by articulating and implementing strategies and policies that would secure the firm's going concern and deliver results that delight the owners. Consequently align shareholders expectations with management's actions. This would make the firm attractive to potential shareholders thus increase performance of the quoted commercial banks.

On the other hand, executive equity bonuses are negatively and insignificantly related with return on equity of the quoted commercial banks. This implies that share options and executive equity bonuses to CEOs and other top corporate executives would depreciate return on equity. This corroborates Zou, et al (2016), Brisker, et al (2014) and Balafa & Florakis (2014) who observed that CEOs equity would be inimical to corporate performance as having the CEOs wealth concentrated in equity could curtail the ability of accepting risky projects that seem risky. Thus, the CEOs exposure and incongruity in terms of risk appetite could curtail return on equity. Nevertheless, the relationship between executive bonuses and return on equity is seen to be positive, but insignificant. Banker, et al (2013), Lin, et al (2013), Brisker & Wang (2017), Shim & Kim (2015), Cooper, et al (2016) and Jouber (2016) have previously made similar findings between the variables. This implies that corporate executives would strive to deliver positive results and better return on equity to the commercial banks that the appropriately and take their welfare as a top priority.

**Table 3: Panel Unit Roots Tests** 

	Statisti		Cross	Ob	Order		
Method	c	Prob.**	sections	S	of int	Remark	Decision
			ROE	•			
	-				1(I)	Stationary	Reject
	7.8431			13			H0
Levin, Lin & Chu t*	0	0.0000	13	0			
	-			13	1(I)	Stationary	Reject
Im, Pesaran and Shin	3.7883			0			H0
W-stat	0	0.0001	13				

ADF - Fisher Chi-	94.15			13	1(I)	Stationary	Reject
square	69	0.0000	13	0		-	H0
PP - Fisher Chi-	241.5			13	1(I)	Stationary	Reject
square	48	0.0000	13	0			H0
			<b>EPS</b>				
	-			13	1(I)	Stationary	Reject
T	6.9840	0.0000	10	0			H0
Levin, Lin & Chu t*	4	0.0000	13	10	1 (T)	a	ъ.
I D	2.0670			13	1(I)	Stationary	Reject
Im, Pesaran and Shin	3.0670 6	0.0011	12	0			H0
W-stat ADF - Fisher Chi-	o 77.19	0.0011	13	13	1(T)	Stationary	Daigat
	52	0.0002	13	0	1(I)	Stationary	Reject H0
square PP - Fisher Chi-	234.6	0.0002	13	13	1(I)	Stationary	Reject
square	14	0.0000	13	0	1(1)	Stationary	H0
square	14	0.0000	ESS	O			110
	_		200	13	1(I)	Stationary	Reject
	8.5524			0	- (-)	2	H0
Levin, Lin & Chu t*	8	0.0000	13				
,	_			13	1(I)	Stationary	Reject
Im, Pesaran and Shin	2.8547			0	` '	· ·	H0
W-stat	9	0.0022	13				
ADF - Fisher Chi-	78.45			13	1(I)	Stationary	Reject
square	03	0.0005	13	0			H0
PP - Fisher Chi-	111.2			13	1(I)	Stationary	Reject
square	97	0.0000	13	0			H0
			EEH			- ·	
	-			13	1(I)	Stationary	Reject
T	19.388	0.0000	10	0			H0
Levin, Lin & Chu t*	2	0.0000	13	12	1 (T)	C4 - 4:	D - ! 4
Im Dassaum and Chin	- 5.0260			13	1(I)	Stationary	Reject
Im, Pesaran and Shin W-stat	5.9269 7	0.0000	13	0			H0
ADF - Fisher Chi-	83.49	0.0000	13	13	1(I)	Stationary	Reject
square	63. <del>4</del> 9	0.0001	13	0	1(1)	Stationary	H0
PP - Fisher Chi-	272.1	0.0001	13	13	1(I)	Stationary	Reject
square	55	0.0000	13	0	1(1)	Stationary	НО
1 <del></del>		0.000	EBS	•			
	_			13	1(I)	Stationary	Reject
	156.90			0	` /	J	H0
Levin, Lin & Chu t*	2	0.0000	13				

Im, Pesaran and Shin W-stat	- 26.188	0.0000	13	13 0	1(I)	Stationary	Reject H0
ADF - Fisher Chi-	98.57	0.0000	13	13	1(I)	Stationary	Reject
ADI' - Pisher Chi-				_	1(1)	Stationary	3
square	74	0.0000	13	0			H0
PP - Fisher Chi-	300.9			13	1(I)	Stationary	Reject
square	45	0.0000	13	0			H0

Source: computed from E-view 9.0

- Null Hypothesis: Unit Root (common Unit Root process), Automatic lag length selection based on Modified Schwarz Criteria and Bartlett kernel.

It can be seen from the Table (3) above that the data are stationary at first difference for 1%, 5% and 10% levels of significance. It is therefore deduced that the series are characterized as I (1) process; consequently, suitable for a use in a test for panel cointegration between executive compensation and return on equity of quoted commercial banks.

**Table 4: Pedroni Residual Cointegration Test** 

	_		Weighted <u>Statis</u>	
	<b>Statistic</b>	<u>Prob.</u>	tic	<u>Prob.</u>
Panel v-Statistic	2.049233	0.0202	-1.346821	0.9110
Panel rho-Statistic	3.645175	0.9999	3.355499	0.9996
Panel PP-Statistic	-4.643338	0.0000	-6.583605	0.0000
Panel ADF-Statistic	-0.143616	0.4429	-1.479536	0.0695
Alternative hypothesis: inc	lividual AR coefs. (be	etween-dimens	sion)	
	<b>Statistic</b>	Prob.		
Group rho-Statistic	5.519163	0.0000		
Group PP-Statistic	-10.31419	0.0000		
Group ADF-Statistic	-3.376433	0.0004		

Source: E-Views Version 9

Table 4 presents the panel cointegration test on the effect of executive compensation on return on equity of the quoted commercial banks. The panel cointegration results provide us with evidence of cointegration since most of Pedroni test statistics reject the null hypothesis of no cointegration for the two estimated models. Two out of the four test statistics proved the presence of cointegration while from the group statistics group ADF is not significant which implies that there is no cointegrating effect.

<sup>\*</sup> Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality, Im, Pesaran and Shin; ADF - Fisher and PP - Fisher - Null Hypothesis: Unit Root (Individual Unit Root process). Levin, Lin & Chu Test.

**Table 5: Pedroni Residual Cointegration Test** 

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-0.341719	0.6337	-1.825537	0.9660
Panel rho-Statistic	2.381965	0.9914	2.554889	0.9947
Panel PP-Statistic	-10.42482	0.0000	-10.24774	0.0000
Panel ADF-Statistic	-2.452793	0.0071	-2.162887	0.0153
Alternative hypothesis: indivi	idual AR coefs. (b	etween-dime	ension)	
	<b>Statistic</b>	Prob.		
Group rho-Statistic	4.580927	0.0000		
Group PP-Statistic	-13.78425	0.0000		
Group ADF-Statistic	-3.016912	0.0013		

Source: computed from E-view 9.0

Table 5 presents the panel cointegration test on the effect of executive compensation on earnings per share of the quoted commercial banks. It is also important to note that, the panel cointegration results provide us with evidence of cointegration since most of Pedroni test statistics reject the null hypothesis of no cointegration for the two estimated models. Two out of the four test statistics proved the presence of cointegration while from the group statistics group ADF is not significant which implies that there is no cointegrating effect.

#### CONCLUSION AND RECOMMENDATIONS

## **Conclusion**

This study examined the relationship between executive compensation and financial performance of quoted commercial banks in Nigeria using panel data of 13 quoted commercial banks from 2013-2022. From the findings, the study conclude that executive salary has positive and significant effect on return on equity, executive equity holding have positive but no significant effect while executive bonuses have negative and no significant effect on return on equity of the quoted commercial banks and that executive salaries have negative relationship with earnings per share, while executive equity holding and executive bonuses have positive relationship with earnings per share of the quoted commercial banks in Nigeria.

#### Recommendations

- i. An effective pay-performance contract should be designed in order to solve the conflict of interest of agent problem effectively and the senior executives of the quoted commercial banks need to improve.
- ii. Executive compensation packages should be based on performance to align compensation with company success. Performance-based compensation will inspire executives of insurance companies in Nigeria to deliver superior results and ensure the enhancement of financial performance of the quoted commercial banks
- iii. Shareholders of the quoted commercial banks should give prime priority to aligning their interest to that of executive compensation. This is consequent upon the observation of a direct relationship between executive salaries and financial performance of the quoted

- commercial banks; implying that any disruption of such alignment could pose grave consequences to shareholders interest and ultimately financial performance.
- iv. Management of the quoted commercial banks should adopt good compensation structure, welfare and incentive packages as this would positively motivate executives and consequently improve financial performance.

## **REFERENCES**

- Adegoroye, E., Sunday, O. M., Soyinka, K. A. & Ogunmola, J. O. (2017). Executive compensation and firm performance: evidence from Nigeria firms. *International Journal of Advanced Academic Research | Social & Management Sciences*, 3(7), 23-39.
- Aduda, J. (2011). The relationship between executive compensation and firm performance in the Kenya banking sector. *Journal of Accounting and Taxation.3(6), 130-139*.
- Akinwunmi, O.D (2020). The determinants of CEO compensation in Nigeria: a quantitative study (Master Thesis, Linne universitetet).
- Anyamaobi, C., & Lucky, A. L., (2017). Corporate characteristics and value creation: A panel data evidence of Nigeria quoted manufacturing firms. *World Journal of Finance and Investment Research*, 2(1), 31-49.
- Appah, E., Tebepah, S.F., & Awuji, C.E. (2020). Directors' compensation and financial performance of deposit money banks in Nigeria. *World Journal of Finance and Investment Research*, 5(1), 61-76
- Atrill, P., McLaney, E., Harvey, D., & Jenner, M. (2009). Accounting: An introduction. 4th Edition, Pearson Education, Australia. Ayodele, J.C. (2012). Executive compensation structure, ownership and firm performance nexus: An empirical analysis. European *Journal of Humanities and Social Science*, 17(1), 88-888.
- Bhatnaga, C.S., & Trimm, Q. A. R. (2011). Executive compensation, firm performance and risk in the financial crisis period 2000-2009: An empirical analysis of NASDAQ companies. *International Journal of Business Humanities and technology*, 1(2), 72-78.
- Campbell, S.K. (2015). CEO and executive vice president compensation and company performance: An empirical study. The International Journal of Business and Management, 3(2), 20-25.
- Conyon, M.J., & He, L. (2011). Executive compensation and corporation governance in China. Journal of Corporate Finance, 17(4), 1158-1175.
- Davies, S. D., & Lucky, A. L., (2018). Corporate characteristics and influence on share based payment of financial service firms in Nigeria. *Asian Finance & Banking Review*, 2 (1), 18-29.
- Demirer, I., & Yuan, J.J (2013). Executive compensation structure and firm performance in the U.S restaurant Industry: An agency theory approach. Journal of Food service Research, 16(5), 421-438.
- Doucouliagos, H., Askary,S., & Haman, J. (2008)> directors remuneration and performance in Australian banking working paper-economic series, Deakin University.

- Erick, T.K., Kefah, B.A., & Nyaoga, R.B. (2014). The relationship between executive compensation an financial performance of insurance companies in Kenya. Research of Financial and Accounting. 5(1), 113-122.
- Ghosh, A. (2003). Board structure, executive compensation and firm performance in emerging economies: Evidence from India. Working paper, Indian Gandhi Institute of Development Research.
- Gregg, P., Jewel, S., & Tonks, I. (2011). Executive pay and performance: Did bankers bonuses causes the crisis? Working paper, University of Bristol, University of reading and University of Bath.
- Hasen, R.B. (2015). Executive CEO compensation and performance in French family firms. Afro-Asian Journal of Finance and Accounting, 4(4).
- Ibeawuchi, R.O., & Onuora, J.K (2021). Executive compensation and performance of quoted consumer goods companies in Nigeria. *International Journal of Business and Law Research*, 9(2), 4-35.
- Ibrahim, M.B., & Ahmed, A.Z (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.
- Idekobi, E.I., Onyeizugbe, C.U., & Akpunonu, E.O. (2011). Compensation management as tool for improving organizational performance in the public sectors: A study of the civil service of Anambra State of Nigeria. Sacha journal of Policy and strategic Studies, 1(1), 109-120.
- Isnail, S.B., Tabai, N.V., & Hahn, L.J. (2014). Relationship between CEO pay and firm performance: Evidence from Malaysian listed firms. IOSR Journal of Economics and Financial, 3(6), 14-31.
- Jaafar, S.B., Wahab, E.A.A., & James, K. (2012). Director remuneration and performance in Malaysian family firms: An expropriation matter? World review of Business research, 2(4), 204-222.
- Kato, T., & Long, C.(2005). Executive compensation, firm performance, and corporate governance in China: Evidence from firms listed in the Shanghai and Shenzhen Stock exchanges. IZA discussion paper No. 1767.
- Krauter, E., & Ferreira de Sousa, A. (2013). Executive compensation and corporate financial performances: Empirical evidence in Brazilian industrial companies. Journal of modern accounting and auditing. 9(5), 650-661.
- Lam, K.C.K, McGuiness, P.B, & Vieto, J.P. (2013. CEO gender, executive compensation and firm performance in Chinese-listed enterprises, Pacific-basin finance journal, 21, 1136-1159.
- Lone, R.R., Hassan, F., & Afzal, M. (2015). Factors effecting CEO compensation: Evidence from listed banks in Pakistan. Proceedings of 10th Annual London Business research Conference 10-11 August 2015, Imperial College, London, UK.
- Lucky, A. L., (2018). Marketing of financial service: Evidence from Nigeria financial market. *International Journal of Marketing Research Innovation* 2(1), 31-46.
- Nowayi, M.M., & Mintz, S.M. (2008). Tenure, firms performance and CEO;s compensation. Management finance 34(8), 524-536.

- Nulla, Y.M. (2014). The comparative study between CEO compensation, CEO/chairman role and accounting performance in New York Stock Exchange (NYSE) companies: An empirical study. Strategic Management Quarterly, 2(1), 47-62.
- Obsan, K.A. (2012). Effect of compensation strategy on corporate performance: Evidence from Nigeria firms. Research Journal of finance and accounting, 3(7), 37-44.
- Olalekan, O.C., & Bodunde, O.B. (2015). Effect of CEO pay on bank performance in Nigeria: Evidence from a generalized method of moments. British of Economics, Management and trade, 9(2), 1-12.
- Omotola, A.O., & Akrawah, D.O (2019). Compensation practices and financial performance of selected quoted companies in Nigeria. *Journal of Social Sciences*, 3(1), 220-239.
- Opudu, D.O., Ogiriki, T., Umbe, A.A. (2022). Firm financial performance and executive compensation in Nigeria. *International Journal of Business Systems and Economics*, 13(5), 212-224.
- Ozkan, N. (2011). CEO compensation and firm performance: An empirical investigation of UK panel data. European financial management, 17(2), 260-285.
- Ramadan, I.Z. (2013). Jordanian evidence for the pay-performance relation. International Business research, 6(3), 174-182.
- Scholtz, H.E., & Smit, A. (2012). Executive remuneration and company performance for South African companies listed on the alternative exchange. Southern African Business Review, 16(1), 22-38.
- Shin, E.D., Lee, J., & Joo, I.K. (2009). CEO compensation and US high tech and low-tech firms corporate performance. Contemporary management research, 5(1), 93-106.
- Sigler, K.J. (2011). CEO pay and company performance in media industry. Business management dynamics. 1(5), 17-23.
- Solomon, K. N., Abdulraman, A., & Leah, N. K. (2022). Corporate performance and executive compensation: evidence from listed insurance companies in Nigeria. *International Journal of Research in World Politics, Diplomacy, Strategic Management and Leadership (IJORIWP-DSMAL)*, 2 (1), 52-70.
- Sun, F., Xianging, W., & Huang, X. (2013). CEO compensation and firm performance: Evidence from the U.S. property and liability insurance industry. Review of accounting and finance, 12(3), 252-267
- Wang, Q., Wu, C., &Wang, X. (2014). The relations between executive compensation and firm performance in Chinese family firms: Moderating role of family management. Management science and engineering ((ICMSE) International conference.
- William, M (2020). Bank performance, CEO ethics, and compensation: evidence from Nigeria. *American Journal of Economics*, 10(2), 82-96.