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## Impacts of Corporate Structural Changes on Performance of Banks and Non-Bank Financial Institutions in Nigeria, 2005-2019

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### Abstract

This study investigated the impacts of corporate structural changes on performance of banks and non-bank financial institutions in Nigeria covering a period of 15 years (2005-2019). The capital structural change was captured with absolute change in debt equity ratio, total debt ratio, long-term debt ratio short-term debt ratio while the performance was measured with dividend per share and gross earnings. The study adopted ex-post facto research design which provides empirical solutions to research problems by using already existing data. The secondary data was extracted from the published financial report of the sampled firms. Population of the study included all the 14 quoted Deposit Money Banks (DMBs) and 25 Insurance Companies in operation in Nigeria. The sample size of the study is delimited to 10 quoted DMBs and 10 Insurance firms in Nigeria and this was achieved through random sampling technique. The collected data were analyzed using quantitative econometric techniques such as descriptive analysis, correlation analysis and panel regression analysis. It was discovered that when the model was controlled with firm size and asset tangibility, absolute changes in total debt ratio, absolute changes in long term debt ratio and absolute changes in short term debt ratio have a positive but insignificant effect on gross earnings of deposit money banks and insurance companies in Nigeria. Also, it was disclosed that there is a significant effect of absolute changes in the components of capital structure on dividend per share. This study, therefore, established that absolute changes in debt-equity ratio, total debt ratio and long-term debt ratio have no potency to significantly engender increase in the financial performance of deposit money banks and insurance companies in Nigeria, absolute changes in short-term debt can significantly dictate the direction of their financial performance.

**Keywords:** Corporate Structure, Debt, Equity, Performance, Dividend Per Share, Gross Earnings.

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## 1.1 Introduction

It is a general fact that the economy of Nigeria is partly driven by its dynamic financial system (Babatunde, Bolade & Olasusi, 2019). This system, which is regulated by several supervisory bodies such as the Central Bank of Nigeria (CBN), Nigeria Deposit Insurance Corporation (NDIC) and the Securities and Exchange Commission (SEC), enables the outflow of resources/funds from surplus units to the deficit units. By surplus units, it means those economic units whose income exceeds their expenditures within a specified period; thus, facilitating lending within this period. Deficit on the other hand refers to those economic units whose financial need or expenditure exceeds their income within any given period; hence they need loans from these surplus units. In this way, financial institutions intermediate between the people with surplus funds and those in deficit and because of this vital role, it is called a financial intermediary (Braik & Messar, 2019).

In the Nigerian context, financial institutions are divided into two groups namely banks and non-bank financial institutions. While banks are financial institutions that engage in the acceptance of deposits and safekeeping of valuables, non-bank financial institutions such as Insurance companies are firms that do not have a full banking license and are not fully supervised by national or international Banking regulatory agencies (Muhammed, 2019; Kerim, Alaji & Innocent, 2019). However, these financial institutions (Bank and Non-Bank) complement the activities of each other in the intermediation process in an economy. Ogosi and Agbaze (2018) argued that it might be difficult for an economy to thrive if the financial institutions are not healthy and sound. This implies that the performance of the financial institution is germane to the holistic growth and competitiveness of a nation. It is therefore worthy to examine the performance of financial institutions in Nigeria and its determinants.

According to Adam (2020), performance is the ability to distinguish the outcomes of organizational activities. Performance can either be financial and non-financial. The non-financial performance can be measured using operational key performance indicators such as market share, innovation rate or customer satisfaction (Andi, Addul-Rahman, Zainuddin & Suriyanti, 2020). Financial performance is a subjective measure of how well a firm can use its assets from its primary role of conducting business and its subsequent generation of revenues. This term is also used as a general measure of a firm's overall financial status over a given period. Many organisations specifically use accounting key performance indicators such as return on equity, return on assets, sales growth, net profit margin (Adam, 2020). The advantage of these common measurement tools is their availability and adoption by the banking industry. However, in the context of this study, financial performance will be captured with dividend per share, earnings per share, gross earnings and profit after tax. Profit is the decisive aim of Bank and non-Bank financial institutions and hence all the operational activities carried out are meant to achieve this golden goal. To ensure the attainment of this objective, several internal and external factors capable of influencing the performance of Banks have been the focus of many scholarly works. While the external factors such as government policies and even pandemic (like COVID-19) might be difficult

to manipulate by the financial institutions, they are expected to have absolute control over the internal factors that are not limited to credit management, ownership structure, employee management, corporate image and brand equity, risk management and corporate structural change.

However, the focus of this study revolves around the connection between corporate structural changes and performance of deposit money banks and insurance companies in Nigeria. Structural changes are common in industries, particularly in financial institutions, because of the intermittent developments of the external and internal environment. These are sometimes due to a corporate change in structure, vision, strategy, skills or even technological advancement. Olaoye and Fakiyesi (2018) viewed corporate structural changes as an alteration in the operational structure, investment structure, financing structure and governance structure of a company. It can also be viewed as various actions such as divesting of under-performing business, spin-offs, mergers, stock acquisition and debt exchange, which are usually a one-time transaction (Seger & Pfnur, 2021). Corporate structural changes are profitable in several ways which are not restricted to reducing operational costs and aids in better creation and execution of strategies.

Almajali and Shamsuddin (2019) claimed that corporate structural changes can either be portfolio, capital and/or organizational structural changes. This study is grounded on corporate restructuring which emanates with the changes in capital structure of financial institutions in Nigeria. Financial structural changes, the focus of this study, entails alterations in the capital structure of a firm like equity and debts financing and short-term and long-term financing. The objective of financial restructuring is to take measures that avert the impending insolvency that ensure the short-term and long-term survival of the business. The reasons as to why the bank opts for restructuring are notably to become more efficient, better organized and focused on its core business with a revised strategic and financial plan. Restructuring might also help financial institutions to rationalize cost, increase productivity and revenue, improve the welfare of employees, increase the wealth of shareholders, enhance efficiency and improve performance. Based on this background, it is the interest of the researcher to examine the effect of corporate structural changes on the performance of deposit money banks and insurance companies in Nigeria.

## **1.2 Statement of the Problem**

Capital structural changes are reoccurring phenomenon among banks and non-bank financial institutions because of various reforms instituted by the regulatory agencies and in order to realign themselves with their core operational activities and objectives. This is considered necessary to remain relevant in the industry. Expanding this, Chuke and Kenneth (2018) claimed that for any bank to profitably compete and survive in the banking industry, performance evaluation should be considered imperative and where possible, financial restructuring should be embraced to minimize costs and increase efficiency. Olaoye and Fakiyesi (2018) pointed out that with proper restructuring, financial institutions would be

able to stage an outstanding development and rejuvenate their management efficiently. Olaoye and Fakiyesi (2018) further noted that many financial institutions have updated their divisions, restructured their assets and debt instrument and rationalized their operations with the intention to improve the performance level.

Nigeria, as a developing country, is facing a weakening currency, increased inflation rate, and an economy in crisis. These macroeconomic issues are posing challenges to the effective performance of the intermediation role of banks and non-banks financial institutions. Consequently, the loss of confidence in the operational activities of deposit money banks and insurance companies has often been seen as a driving force behind crippling depositor fatigue that ravaged the institution and the embracement of cryptocurrency (Adeyemi, Unachukwu & Oyeniyi, 2017). Corporate restructuring is therefore inevitable in order to address these challenges. It is suspected that the rate of inflation, which is not favourable, will likely remain at its current high level as the local currency continues to dive against the American Dollar.

Several studies have been carried out on structurally related constructs, mostly in terms of ownership and capital, and performance of organizations (Nguyen, Tran, Dinh, Lai & Pham, 2015; Jiahui, 2015; Nora & Anis, 2015; Joseph & Tabitha, 2016; Mathewos, 2016; Adeyemi, Unachukwu & Oyeniyi, 2017; AlamSiddik, Sajal & Shanmugan, 2017; Kluwer, 2017; Godfrey, 2018; Khadijat & Rodiat, 2018; Mohammad & Faudziah, 2018; Chuke & Kenneth, 2018; Cuibing, 2019; Muhammed, 2019; Hasan, Ahsan, Rahaman & Alam, 2019; Almgir, Abdullah & Saifullah, 2019; Adam, 2020; Bishnu, 2020). Worrisomely, none of these studies took into consideration changes in the components of capital structure within the fiscal years with performance indicators that form the basis for the maximization of the wealth of shareholders. This was a gap in literature that this study intends to fill. Thus, this study is designed to examine the effect of corporate structural changes on performance of banks and non-banks financial institutions in Nigeria.

## 2.1 Conceptual Review

### 2.1.1 Corporate Structural Change

Corporate structure represents the background of finance and/or ownership of a firm, as presented by the origin of finance employed for its transaction. It also encompasses the trend of legal association and responsibilities, the tasks allotted to various units and employees in the organization, organization of these tasks, the hierarchical association within the firm and the rules, processes, ethics, appraisal systems etc. that monitor the actions and dealings of people in the organization (Chadha & Sharma, 2015). The structure of any firm is very wide and encompasses a lot of factors; however, not all of them hold equal significance at a particular point in time. The structure of a firm must properly represent the type of environment where it networks particularly, the external environment. The structure of an organization denotes the recognized trend of formal relation among different factions of the organization (Chuke & Kenneth, 2018).

At times, the structure of an organization needs to be changed due to the pressures of the environment. In such cases, the adaptation or adoption of new policies would need to be effective and efficient, so that optimum performance can be maintained. To this effect, corporate structural change can also be recognized as restructuring. According to Chadha and Sharma (2015), restructuring is the activity of reorganizing the legal, ownership, operational or other configurations of a firm for the objective of ensuring it is more profitable and more organized for its current necessities. Most corporations opt for restructuring so as to become more efficient and concentrated on their core business with a reviewed strategic and financial design. Restructuring also aids to simplify costs, improve productivity and revenues, increase employees' welfare, raise shareholders' wealth, improve efficiency and increase performance (Chadha & Sharma, 2015).

Capital structure represents the way the firm sponsors its activities through the mixture of debt and equity (Parvesh & Afroze, 2018). Raji, Bamgbose, Olusegun and Abidoye (2018) averred that the blend of equity and mix has been one that has plagued the academic world since its notice by Modigliani and Miller in 1958. The issues basically focus on its determination, assessment and accounting. Capital structure could determine the profit maximization objective, sustainability and ideal achievement of the whole business objectives. Capital structure is a blend of a firm's debts (long-term and short-term), common equity and preferred equity. In essence, it entails two major factors; debt and equity. The ideal capital structure of the firm is one that reduces the cost of capital. In other words, an ideal balance between debt and equity would cause an overall reduction of the cost related with these components. Capital structure is one of the major facets of corporate structure for the successful undertaking of any company. Capital structure targets long-term financing sources employed by firms to fund their development and to raise their market worth (Salawu, 2020).

Capital structure aid firms' managers perform decisions based on the type and level of finance needed in terms of magnitude, which would cause a total reduction of the costs related with acquiring this finance. This view means that the demand and supply of finance influence the capital structure, but at the same time, the riskiness related with the firm's cash flows influences the capital structure. That is, the more the unpredictability of the cash flows of the firm, the more the impact of this risk on the firm's capability to obtain debt and/or equity. Capital structure decisions are mainly dependent on the influence of the external environment on the firm and the tactics the firms employ to make sure that the worth of the firm is improved (Samson, Omotunde & Srafadeen, 2017). Observably, higher firms tend to employ more of debt while smaller firms are more probably to employ equity, in their respective funds. In finance, capital structure represents the way in which an organization's activity is sponsored using a blend of long-term capital like ordinary shares and reserves, preference shares, debentures, bank loans, convertible loan stock and so on and short-term liabilities like bank overdraft and trade creditors. A firm's capital structure is thus the configuration or structure of its liabilities.

### ***2.1.2.1 Debt Financing***

Debt as a form of financing for businesses simply denotes borrowings from external entities, outside the organization. In another vein, debt is any type of finance that is subject to the disbursement of stable return, like long term loan, preference shares and debentures. An entity's debt could be a combination of both short-term debt and long-term debt. Chuke and Kenneth (2018) accentuated that the impact of utilization of debt in a firm's capital structure could have both positive and negative impact on the firm's worth, even when there is no corporate tax and bankruptcy cost. In essence, debt encompasses those sources of fund obtained from people recognized as outsiders to the activities and transactions of a firm.

Braik and Messar (2019) stated that debt as a source of fund for firms could be evidenced as corporate bonds, medium and long-term credits from bank or line credits from producers. Conversely, outright borrowings by a firm make her a creditor to the lenders. This is usually evidenced through issuing of debentures, bonds or other types of debt instruments. When debt is obtained from external sources (either external individuals or external group), they are recognized by the company as debt holders. Debt holders are eligible to a stable sum of interest to be disbursed, before the equity or shareholders. Additionally, they have reduced control over decision making in the company.

### ***2.1.2.2 Equity Financing***

Equity is the variance between the worth of the assets/interest and the cost of the liabilities of something owned. In the context of accounting, shareholders' equity which could be stock holders' equity, shareholders' funds and shareholders capital denote the equity of a firm as distributed among individual shareholders of common or preferred stock (Muhammed, 2019). From the context of financial accounting, owners' equity encompasses all the net assets of the business which is the variance between the total assets of the company and all its liabilities. Equity also forms part of the capital of the business. Equity financing means exchanging ownership shares for finance. In the sense that firms would need finance, but instead of borrowing from external sources, they would trade their share for funds. Pecking order theory believes that this form of finance should be the last option that any firm would adopt.

Olaoye and Fakiyesi (2018) asserts that the impact of equity on performance could be related to the impact of ownership structure on performance. Equity financing actually denotes share ownership which is atomistic in nature. It could be greatly distributed or focused. Implicitly, distributed equity share means that there are a lot of owners with each having few units of shares, while focused equity means that there are few shareholders with each holding large unit of shareholdings (institutional shareholdings).

### ***2.1.1.3 Long Term Debt to Total Assets (LTDTA)***

The ratio of long-term debt to total assets is defined as the ratio of the financial status that represents the organization's ability to meet its financial requirements. It is believed that the ratio of long-term debt to total assets is an indicator to measure the financial leverage of an organization. It measures the relative weight of long-term debt to the organization's capital structure (long-term financing). Since the ratio is calculated annually, a decrease in the ratio means that the company is doing well and has less investment demand for debt. Conversely, the higher the level of long-term debt, the more important a company with positive income and stable cash flow. Therefore, it is helpful for the manager of the organization to check its debt structure and determine its debt capacity.

### ***2.1.1.4 Short Term Debt to Total Assets***

According to STDTA is an indicator to measure the financial leverage of a manufacturing company. It reveals how much short-term debt provides for assets. Short-term debt refers to the debt that should be paid off within 12 months (one year) or less than 12 months (one year), and is not included in the long-term debt figure in the company's financial statements. The ratio of short-term debt to total assets includes accrued expenses and creditors. It is the proportion of the financial situation that represents the company's ability to meet its current financial requirements.

### ***2.1.2 Performance***

Performance is a subjective measure of how well a firm can use its assets to generate revenues. This term is also used as a general measure of a firm's overall financial status over a given period of time and can be used to compare similar firms across the same industry or to compare industries or sectors in totality. Adam (2020) viewed performance in two different ways; a means of achieving an outcome and an end result. He further explained that performance involves the series of activities/actions towards achieving a desired outcome or result at a given time. In a similar view, Babatunde, Bolade and Olasusi (2019) posited that performance is the capability to differentiate the end results of organizational activities. This underpins that performance is the relevant results of an organization after effective utilization of the various limited resources. In every organization, standards are set/put in place of which resources are pull together (human and materials) and utilized to give an output to be compared with the set standards/goals. Hence, the actual result is known as performance (Olaoye & Fakiyesi, 2018).

In the view of Godfrey (2018), performance is the final outcome of evaluating an effort towards the achievement of a predetermined goal and objectives. Corroborating this, Hafiz (2017) noted that performance is the expected outcome of a series of activities. These definitions show that performance is the result of a set of activities. It is the effective and efficient utilization of scarce resources towards the achievement of a desired goal. Consequently, the indicators for measuring the financial performance of deposit money

banks and insurance companies as commonly used in the preceding studies include, return on asset (ROA), return on equity (ROE), return on investment (ROI), TOBIN Q, market share, revenue growth and cost merit. However, in the context of this study, the following financial performance indicators shall be critical looked into; gross earnings, dividend per share, earnings per share and profit after tax.

### ***2.1.2.1 Gross Earnings***

This is one of the indicators used in the deposit money banks and insurance companies to measure the financial position. The aggregate of the amount left after the deduction of the cost of sales from the total revenue (Muhammed, 2018). In the left balance, costs like taxes expenses and other adjustment incurred by an organization at a given period make up the gross earning. For instance, when goods are purchased from a supplier at the rate of #10,000, summing up other expenses in relation to ready for use decision such as cost of transportation, cost of packaging, cost of repackaging, cost of expediting, taxation and may other expenses in addition to the expected profit. At the long run such goods are sold at the rate of #19500, hence, the gross earning is #9,500. Ngwoke and Nwanneduiké (2019) defined gross earnings as the income of a business entity prior taxes and other deduction. Gross earning is synonymous to gross income.

### ***2.1.2.2 Dividend Per Share (DPS)***

Dividend policy of every firm differs from one to another. The management practices and views regarding the allocation of earnings to the various shareholders in form of dividends is known as dividend policy (Joseph & Tabitha, 2016). Iavorskyi (2017) posited that dividend policy is the exchange of retained earnings for securities. The proportion of earnings not distributed is known as retained earnings. Juan and Gonzalo (2019) asserted that retained earnings is the most reliable and cheapest sources of internal funds to finance a business entity. Thus, the alternative forgone of dividend payment is retained earnings.

## **2.2 Theoretical Review**

### ***2.2.1 Irrelevance Theory***

The first proposition concerning capital structure was advocated by Modigliani and Miller in 1958. They asserted that with corporate income taxes, leverage will raise a firm's value. This happens because interest is a tax-reducible expense; thus, more of a levered firm's operating earnings goes through to investors. However, for companies with huge tax benefits from option exercise, operating incomes can rise even if the profitability of the company's core business is not altered. One of the basic assumptions of this model is that in a perfect capital market, the worth of the organisation is wholly independent of its capital structure, and thus debt and equity are absolute alternatives for each other.

Conversely, once the hypothesis of perfect capital markets is ignored, the decision of capital structure becomes a significant worth-manipulating factor. This theory upholds that there is independence of investment and financing actions. It also advances a defense of the net operating income approach in lieu of leverage on the cost of capital and the worth of the firm, which states that the firm's worth and overall cost of capital are independent of the firm's capital structure. Irrelevance theory stems from the behavioural hypothesis that investors would employ arbitrage to make the weighted average cost of capital (WACC) stable when variances in firm's incomes happen (Adesina, Nwidobie & Adesina, 2015). Practically, this theory states that a company could have a capital structure made up of 100% debt, which will not in any way influence the worth of the company.

Irrelevance theory affirms that in a capital market void of taxes, transaction costs, asymmetric information, and other abrasions, the worth of the firm is independent of its capital structure choice. A firm's worth according to this theory, is the net present value of the stream of cash flows created by its investments. Once investment choices have been made, financing decisions cannot influence firm value (Assad, 2016). Additionally, the project's cash flows and risk adjusted cost of capital are independent of how the finances are obtained for the project. In a simple proposition, this theory asserts that a person cannot make himself richer by taking money out of one pocket and placing it into another.

This theory seems to have some strong assumptions. However, it has been criticized based on some factors. Firstly, the assumptions of this theory are very impractical and unrealistic, although, theoretically these assumptions are attractive (Iyoha & Umoru, 2017). This model believes that perfect capital markets exist which is a far cry from reality. Additionally, this approach assumes that there are no floatation expenses and no time gaps are needed in increasing new equity, which is very contradictory to real life scenarios (Joseph & Tabitha, 2016). Another farce of this theory is the fact that it assumes there are no transactions costs. This theory was limited because it upholds that there are no tax rates. The relevance of this theory to the study is evidenced on the basis that the weighted average cost of capital (WACC) is independent of the debt equity ratio and equal to the cost of capital which the firm would have with no gearing in its capital structure. Implicitly, the appropriate capitalization level for a firm is the rate implemented by the market to an ungeared company in the relevant risk category. Another relevance is the reliance on the substitutability of the shareholders' personal gearing for the firm's gearing.

### *2.2.2. Agency Cost Theory*

Jensen and Meckling (1976) are widely accepted as the founders of this theory. They explained that the agency relationship within the firm is a contract or agreement under which one or more entity (the principal) empowers another entity (the agent) to undertake some operations on their behalf which entails assigning a degree of decision-making authority to the agent. According to this theory, professional management style (i.e., the parting of ownership from management) may produce agency conflicts which is initiated by inadequate

work effort of manager, exploiting incentives in forms of bonuses and allowances, selecting inputs or outputs based on one's likings. These reasons could make a firm fail to maximize its worth. Conversely, these reasons can maximize manager's wealth and utility.

In the context of this study, this model advocates that selecting the best capital structure may diminish agency conflicts and lessen agency cost. In essence, this theory asserts that high leverage/debt ratio aids a firm to mitigate its agency cost and reduce agency conflicts. Debt ratio also spurs managers to act more in the benefits of shareholders. As a consequence, the firm's worth intensifies. Cole, Yan and Hemley (2015) accentuates that capital structure can be determined by agency theory, because of costs due to the clash of interests between different groups in a firm. That is, clash of interests would affect capital structure through performance of the managers.

Some scenarios could cause the agent to utilize resources to ensure that he will not take some decisions which will be contradictory to the principal's interest. Agreeably, neither law nor contracts can guarantee the principal absolute security from clash of interests. This is because information is imperfect and carries its price tag, and creating legal contract is also expensive (Hafiz, 2017). In this theory, information could be perfect if all the concerned entities give a positive probability to the same upcoming state of nature, and if all the concerned entities recognize all probable tactics of the agent and their results in every state, e. g. all entities give the same market worth to any tactic of the agent. Under perfect information and costless contracting, contracts would be formed to define the exact actions, which would get the best out of the market worth of all firms. These contracts would also advocate when to liquidate the firm and how to allocate the liquidation worth.

Imperfect information denotes that managers are more knowledgeable than capital owners in both ex-ante and ex-post condition of the world (Hasan, Ahsan, Rahaman & Alam, 2019). Ex ante means that they recognize better, the expected conditions of the environment influencing the firm and the activities that can be carried out. Ex post means that managers are more knowledgeable of the actual state of the firm's environment and the realized action's result. These information imperfections, in addition to expensive contracting, make it beneficial to propose incomplete contracts between managers and principals. However, incomplete contracts provide the likelihood for the manager to commandeer the principal by choosing non-Pareto efficient actions.

Thus, it is difficult to guarantee that the agent will make ideal choices from the principal's perspectives. Jensen and Meckling (1976) affirm that agency costs is the major instrument in assessing substitute structures of principal-agent associations. They outlined agency costs as the sum of (i) monitoring expenses by the principal, (ii) the bonding expenses by the agent and, (iii) the outstanding loss i.e., the monetary correspondent of the decrease in the benefit of the principal as a consequence of the variances between the agent's choices and those choices which would increase the benefits of the principal. The decision to structure the capital structure of the firm, lies heavily on the shoulders of the agents.

Agency theory believes that they can structure the capital structure in such a way that would benefit them and hinder shareholders' wealth, or they can structure it in such a way that shareholders' wealth would be maximized. Essential perceptions into the challenges surrounding capital structure can be obtained if they are viewed from the perspective of principal-agent theory. Many principals such as shareholders, customers, and so on are actually reliant on an agent, which breeds conflicts of interests (Iavorskyi, 2017). These conflicts of interest originate from the structure of the claims against the firm, which are the portion of the shares held by the owner/manager, the quantity of shares possessed by non-owner managers, and the creditors' claims. This capital structure proposes a kind of sharing law, and outlines the activities that could be regarded as ideal from the agent's perspective.

Despite the seemingly significant tenets of this theory, it has been criticized based on some limitations. Firstly, it is actually difficult to quantify or monetize shareholders' interest. Investors and debt holders' interest might be quantified, but the aggregate shareholders' interest would be difficult to quantify (Ikpefan, Okorie, Agwu & Achugamonu, 2017). Since, these interests cannot be quantified, they would be difficult to be satisfied. Another critic of this theory is that it has been extended to a lot of fields, which has caused unpredicted consequences, like misinterpreting some of its core terms like agency costs, shareholders' wealth, and conflict of interest and so on. This theory finds relevance to the study because it investigates the effects of the sharing law in itself through a thorough scrutiny of agent's actions if a particular capital structure is recommended and if the firm already has the financing. This theory also structures a framework which aids in identifying the ultimate bearers of the losses coming from agency problems. This theory also pinpoints various techniques which can be utilized to tackle these agency problems in diverse cases from which they can spring up. In addition, this model finds relevance to the study because it explains agency costs of equity (conflicts between managers and shareholders) and agency costs of debt (conflicts between shareholders and debt holders) and its effect on capital structure.

### **2.3 Empirical Review of Related Literature**

Jiahui (2015) established simultaneous equations of capital structure and corporation performance using correlation analysis model (2000-2014). The results show that capital structure and corporation performance exist interactive relationship and capital structure, growth ability, equity concentration, board and corporation scale significantly influence corporation performance. In a similar study, Chadha and Sharma (2015) studied the impact of capital structure on firm profitability using 422 Chinese manufacturing firms listed on the Bombay Stock Exchange (2002-2013). Using Pearson correlation and multiple regression analysis model, the study found a positive and significant relationship between capital structure and ROA and Tobins'Q.

Mathewos (2016) investigated the impact of capital structure on financial performance of selected commercial banks in Ethiopia over the past five (5) year period from 2011 to 2015 using secondary data collected from financial statements of the commercial banks. Data

was then analyzed on quantitative approach using multiple regression models. The results indicate that financial performance, which is measured by both ROA, is significantly and negatively associated with capital structure proxies such as DER, SIZE and TANG whereas DR have negative impact. Terzungwe and Abdulateef (2016) carried out a study titled, Capital structure and operating performance of listed conglomerate firms in Nigeria (2001-2015). The study adopted correlation research design using fixed-effect regression model. The result reveals that total debts to total assets have positive and significant impact on noncurrent asset turnover, while shareholders' funds to total assets has negative and insignificant impact on noncurrent assets turnover. Hence, it is established that listed conglomerate firms in Nigeria depends more on short terms debts.

Stella (2018) examined the relationship between structural change and organizational performance of small and medium enterprises in the Lagos metropolis. The major statistical technique employed was a linear regression technique. The hypothesis tested in this study found that structural change has effect on organizational performance of small and medium enterprise within the Lagos metropolis. Consequently, Kerim, Alaji, and Innocent (2019) have examined the effect of capital structure on profitability of listed insurance firms in Nigeria for the period 2013-2017 from secondary data of the 15 listed insurance companies with 75 observations. The study employed multiple regression analysis model. The results showed that short-term debt has a negative and significant and long-term debt has a positive and significant effect on profitability. This differs from the findings of Olaoye and Fakiyesi (2018) that the impact of equity on performance could be related to the impact of ownership structure on performance.

Kajongwe, Bhiri and Chirovamavi (2020) conducted an assessment of Financial Structural Change on the Efficiency of Commercial Banks in Zimbabwe. The study adopted a quantitative research approach rooted in Positivism research Philosophy. The study employed cross-sectional research design and a simple random sample of 100 managerial respondents to elicit information through the use of survey questionnaire. Data obtained were analysed using Statistical Package for Social Sciences (SPSS). The study revealed that commercial banks in Zimbabwe use all the four types of bank restructuring which included, interest rates structure, debt structure, capital requirements structure and liberalization structure. The findings further showed that financial liberalization, interest rates structure, debt structure and capital requirements have significant positive influence on the performance of commercial banks in Zimbabwe. Managing bank restructuring together with deposits and customer loans increases profitability of commercial banks in Zimbabwe. The research concludes that the performance of most commercial banks in Zimbabwe is determined through restructuring bank markets, capital and debt re-structuring to influence financial performance of all banks. The recommendation of the study was that there is need to institute policy reforms geared towards viable restructuring for the adoption of a market based financial system to improve profitability and enhance financial inclusion.

Additionally, Seger and Pfnur (2021) conducted a study on the impact of structural changes on corporate real estate ownership in Germany. The study noted that although real estate resources represent a high percentage of the corporate assets of non-property companies, their future role is unclear which motivated the need to consider ownership strategy and its altering role in order to avoid inefficiencies and not to hinder companies in mastering structural change successfully. Data obtained from a telephone company survey (CATI) among 69 corporate real estate managers of German companies are grouped by performing a two-step cluster analysis according to the degree to which they are affected by structural change. The resulting clusters were then tested regarding differences in their ownership strategy. Findings from the study showed that firms highly affected by structural change exhibit a higher willingness to decrease the proportion of ownership which is evident in the office segment and in increased acceptance of sale-and-rent-back solutions.

Yinusa, Adelopo, Rodionova and Samuel (2019) examined the impact of capital structure on firm performance in Nigeria. The study used dynamic panel model on panel data of 115 listed non-financial firms in Nigeria. Specifically, the study employed the two step generalized method of moments (GMM) estimation method that recognizes the persistence of the dependent variable by including its lag value as an explanatory variable in the regression model. The major findings indicate statistically significant relationship exist between capital structure and firm performance particularly when debt financing is moderately employed. Kayode and Adewoye (2020) examined the relationship between capital structure strategies and stock prices of 30 selected firms in Nigeria. The panel regression technique and random effects model are used to analyze the data of these 30 firms from 2008 to 2017. Findings reveal that three of the variables: equity ratio, debt ratio and gearing have negative but statistically insignificant relationship with stock price. The earnings per share have a positive but statistically insignificant relationship with stock price while dividend per share has a positive and statistically significant relationship with stock price.

## 2.4 Gaps in Literature

All over the world, several studies have been carried out on structural related constructs, mostly in terms of ownership and capital on performance of organizations, but none of these studies take into consideration changes in the components of capital structure within the fiscal years with performance indicators that form the basis for the maximization of the wealth of shareholders. This is a gap in literature that this study intends to fill. It must be noted that there is a rising number of empirical investigations on the effect of corporate structural changes on performance of organisations (Stella, 2018; Olaoye & Fakiyesi, 2018; Kajongwe, Bhiri & Chirovamavi, 2020; Seger & Pfnur, 2021). However, none of these studies captured corporate structural changes in terms of capital structure with total debt ratio, debt-equity ratio, short-term debt ratio and long-term debt ratio. Consequently, the available studies in this contest were mostly carried out in manufacturing firms and deposit money banks.

This present study will cover both deposit money banks and insurance companies in Nigeria to provide a solid ground on which generalisations about the relationship between corporate structural changes and performance of financial institutions could be made. Hence, this study takes cognizance of the impact of the absolute changes in total debt ratio, debt-equity ratio, short-term debt ratio and long-term debt ratio on performance indicators such as gross earnings and dividend per share. In addition, this study will cover periods following the recapitalization reform, in an attempt to ascertain how structural changes in the finance mix of banks, after the bank recapitalization, affect performance of banks in terms of performance indicators such as gross earnings and dividend per share. To bridge these gaps, the following hypotheses were formulated:

H<sub>01</sub>: There is no significant effect of absolute changes in the component of capital structure on gross earnings of deposit money banks and insurance companies in Nigeria.

H<sub>02</sub>: There is no significant effect of absolute changes in the component of capital structure on dividend per share of deposit money banks and insurance companies in Nigeria.

### 3.0 Methodology

The study adopted ex-post facto research design which provides empirical solutions to research problems by using already existing data. The secondary data was extracted from the published financial report of the sampled firms. Population of the study included all the 14 Deposit Money Banks (DMBs) listed on the Nigerian Exchange Group (NGX) and 25 Insurance Companies in operation in Nigeria. The sample size of the study is delimited to 10 quoted DMBs and 10 Insurance firms in Nigeria and this was achieved through random sampling technique. Table 3.1 gives the breakdown of the sampled firms.

**Table 3.1:** *Sampled DMBs and Insurance Firm.*

S/N	Deposit Money Banks	Insurance Companies
1	Access Bank	Nem Insurance Plc
2	First Bank	Mutual benefits Assurance Plc
3	Guaranty Trust Bank	Linkage Assurance Plc
4	First City Monument Bank	Lasaco Assurance Plc
5	Union Bank	Guinea Insurance Plc.
6	United Bank for Africa	Law Union and Rock Insurance Plc
7	Wema Bank	Prestige Assurance Plc.
8	Zenith Bank	Cornerstone Insurance Plc
9	Fidelity Bank	Continental Insurance Plc.
10	Stanbic IBTC	AIICO Insurance Plc.

Source: Authors' Compilation (2023)

The model used by Olaoye and Fakiyesi (2018) to examine corporate structural changes and financial reporting in Nigerian Banking Industry was adapted for this study. While corporate structural change was captured with changes in share capital and changes in share premium, financial reporting was captured with profit after tax and earnings per share.

$$PAT=f(ACE, ACD) \text{ ----- } 3.1$$

EPS=f (ACE, ACD) ----- 3.2

However, this study covered the totality of capital structure and therefore measure corporate structural changes in terms of capital structure with absolute changes in total debt ratio, debt-equity ratio, short-term debt-ratio and long-term debt ratio. Consequently, the model was further modified with the inclusion of additional performance metrics and they are gross earnings and dividend per share. All these modifications were done with the aim of capturing absolute changes in the totality of capital structure and performance of financial institutions in Nigeria.

Hence this study specified four models relating corporate structural change measured in terms of absolute changes in total debt ratio, debt-equity ratio, short-term debt-ratio and long-term debt ratio as a function of performance indicators reported through financial statement which include gross earnings and dividend per share. The study made use of firm size and asset tangibility as control variables. For simplicity Models estimated in the study are presented in functional and linear forms below:

**Model 1:**

GRE = f(ADE, ATD, ALD, ASD FIS AST) ----- 3.3

$GRE_{it} = \alpha_0 + \alpha_1 ADE_{it} + \alpha_2 ATD_{it} + \alpha_3 ALD_{it} + \alpha_4 ASD_{it} + \alpha_5 FIS_{it} + \alpha_6 AST_{it} + \mu_{it}$  - (3.4)

**Model 2**

DPS=f(ADE, ATD, ALD, ASD FIS AST) ----- 3.5

$DPS_{it} = \alpha_0 + \alpha_1 ADE_{it} + \alpha_2 ATD_{it} + \alpha_3 ALD_{it} + \alpha_4 ASD_{it} + \alpha_5 FIS_{it} + \alpha_6 AST_{it} + \mu_{it}$  - (3.6)

Where:

DPS = Dividend per Share; GRE = Gross Earnings; ADE = Absolute Change in Debt Equity Ratio; ATD = Absolute Change in Total Debt Ratio; ALD = Absolute Change in Long-term Debt Ratio; ASD = Absolute Change in Short-term Debt Ratio; FIS = Firm Size; AST = Asset Tangibility;  $\mu_{it}$  represents the error term;  $\alpha_0.....\alpha_6$  are parameter estimates and subscript "it" represents the combination of time and individuality.

Data gathered for this study was analyzed based on quantitative econometric techniques such as descriptive analysis, correlation analysis and panel OLS with fixed effect, random effect and GLS analysis.

## 4.0 Result and Discussion

### 4.1 Descriptive Statistics and Pairwise Correlation

The result presentation begins with the description of the characteristics of the data series and as indicated in Table 4.1. Also, the determination of the multicollinearity problem among variables was carried out using the Pairwise correlation coefficient.

**Table 4.1:** Descriptive Statistics

Variables	Obs	Mean	Standard Deviation	Minimum	Maximum
LGRE	300	14.39544	2.595755	8.823795	20.55187
DPS	300	4.57438	11.99275	1.01212	3.56226
ADE	300	6313.704	100450.2	0.0034824	1733028
ATD	300	.5992627	3.90168	0.0000288	49.46173
ALD	300	.5359673	2.759529	0.000065	33.33364
ASD	300	.2375862	1.387571	0.000028	16.12809
LFIS	300	16.70007	2.339044	12.49464	22.56557
AST	300	.2701209	1.586135	0.0000297	13.38669

Source: Authors' Compilation 2023

Presented in Table 4.1 is the description of the balanced dataset that spanned across 15 years and 20 firms in deposit money banks and insurance companies in Nigeria. The descriptive statistics depicts that the average value for LGRE is 14.39544, with a minimum and maximum values of 8.823795 and 20.55187 respectively. The standard deviation of 2.595755 shows that the risk is lower, as it is relatively far from its mean figure. In the same result, the mean value of DPS is at 4.57338, with a minimum and maximum values of 1.01 and 3.56226 respectively and a standard deviation of 11.99275 which shows that the risk is higher, as it is relatively greater than its mean figure. Also, ADE has an average value of 6313.704, with a minimum and maximum values of 0.0034824 and 1733028 respectively. Its standard deviation which is 100450.2 depicts that the risk is high because the value is relatively greater than its mean value. For ATD, the mean value stood at .5992627, with a minimum and maximum values of .0000288 and 49.46173 respectively.

The standard deviation (3.90168) shows that its risk is relatively high because its standard deviation value is greater than its mean value. Also, the mean value of ALD is at .5359673 with a minimum and maximum values of .000065 and 33.33364. The standard deviation (2.759529) shows that its risk is higher, as it is relatively greater than its mean value. Furthermore, for ASD, its mean value stands at .2375862, with a minimum and maximum values of .000028 and 16.12809 respectively. Unlike LPAT, its standard deviation (1.387571) shows a relatively high risk, as it is greater than its mean. Also, LFIS has an average value of 16.70007, with a minimum and maximum values of 12.49464 and 22.56557 respectively. Its standard deviation which is 2.339044 depicts that the risk is relatively low because the value is far from the mean value. Finally, AST mean value is .2701209, with a minimum and maximum values of .0000297 and 13.38669 respectively. Its standard deviation of 1.586135 shows that its risk is lower, as it is relatively far from its mean value.

### 4.1.2 Correlation Analysis

Table 4.2: Pairwise Correlation

Var.	LGRE	DPS	ADE	ATD	ALD	ASD	LFIS	AST
LGRE	1							
DPS	-0.103*	1						
ADE	0.020	-0.0208	1					
ATD	0.175***	-0.0388	-0.008	1				
ALD	0.187***	-0.0516	0.001	0.48***	1			
ASD	0.214***	-0.0469	-0.005	0.44**	0.53***	1		
LFIS	0.586***	-0.0242	0.12**	0.005	0.0002	0.0343	1	
AST	0.085	-0.0454	-0.01	0.41***	0.41***	0.561***	0.005	1

Source: Authors' Computation, 2023. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

From the result presented in table 4.2, there is a negative relationship between LGRE and DPS with a correlation coefficient of -0.103 for DPS. This indicates that the variables moved in different directions over the period covered. Contrarily, the result also showed that there exists a positive relationship between LGRE, LPAT, ADE, ATD, ALD, ASD, LFIS and AST with the correlation coefficient of 0.773 for LPAT, 0.020 for ADE, 0.175 for ATD, 0.187 for ALD, 0.214 for ASD, 0.586 for LFIS and 0.085 for AST. The result further revealed that the relationship between DPS and the other predictor variables was negative, except for the relationship with EPS which was positive with the values of 0.216. ADE has a negative relationship with all the predictor variables except the relationship with ALD and LFIS which was positive to the tune of 0.001 and 0.12 respectively.

For ALD, its relationship with all the predictor variables was positive. It was shown that the relationship between ASD and other predictor variables was positive with the coefficient values of 0.0343 for LFIS and 0.561 for AST. Similarly, the relationship between LFIS and AST was positive with a coefficient of 0.005. It is observed that several of the correlation coefficients are significant at 5 percent among the explained variables and between explained and explanatory variables. A closer look at the correlation coefficients of all the predictors shows that the highest is 0.561. This indicates that the probability of multicollinearity among our independent or explanatory variables is extremely low.

### 4.2 Inferential Analysis

There are two hypotheses tested using the inferential analysis covering pooled OLS estimation, fixed effect and random effect estimation, Feasible Generalized Least Squares, FGLS, alongside post-estimation tests.

**Hypothesis 1:** There is no significant effect of absolute changes in the component of capital structure on gross earnings of deposit money banks and insurance companies in Nigeria

**Table 4.3:** Pooled OLS Estimation Result  
Series: ADE, ALD, ATD, ASD, LFIS, AST

Variable	Coefficient	Std Error	T-Test	Probability
C	3.331609	.8573713	3.89	0.000
ADE	-1.37	1.18	1.16	0.247
ATD	-.3039386	.175467	1.73	0.084
ALD	.5501035	.2474929	2.22	0.027
ASD	.2582434	.1567001	1.65	0.100
LFIS	.6549454	.0508398	12.88	0.000
AST	-.1450911	.106147	1.37	0.173

Source: Authors' Compilation (2023)  
 $R^2=0.4964$ , Adjusted  $R^2=0.4140$ , F-statistics=32.06, Prob(F-stat) =0.0000.

Pooled estimation result presented in Table 4.3 revealed that when heterogeneity effect across the sampled firms is not given any consideration, ADE, ATD and AST exert an insignificant and negative effect on gross earnings of deposit money banks and insurance companies in Nigeria with the coefficient estimates and P-values of -1.37 ( $p=0.247 > 0.05$ ), -0.3039386 ( $p=0.084 > 0.05$ ) and -0.1450911 ( $p=0.173 > 0.05$ ), respectively. Results also revealed that ALD, ASD and LFIS exert a positive effect on gross earnings of deposit money banks and insurance companies in Nigeria however, the positive effect is only significant for ALD and LFIS as against the insignificant effect of ASD to the tune of 0.5501035 ( $p=0.027 < 0.05$ ) for ALD, 0.6549454 ( $p=0.000 < 0.05$ ) for LFIS and 0.2582434 ( $p=0.100 > 0.05$ ) for ASD. R-square statistics reported in table 3 showed that about 49.64% of the systematic variation in gross earnings can be jointly explained by ADE, ALD, ATD, ASD, LFIS and AST while the remaining 50.36% could be accounted for by other variables not covered by this study. The F-statistics of 32.06 along the probability value of 0.0000 revealed that the model is fit.

**Table 4.4:** Fixed and Random Effect Estimates

FIXED EFFECT ESTIMATE					RANDOM EFFECT ESTIMATE				
Var.	Coe.	St. E.	T-test	Prob	Var.	Coe.	St. E.	T-test	Prob
C	6.801	1.150	5.91	0.000	C	5.16	1.28	2.38	0.017
ADE	4.63	8.13	0.57	0.570	ADE	3.31	8.16	0.41	0.685
ATD	.112	.1356	0.83	0.409	ATD	.0797	.1353	0.59	0.556
ALD	-.006	.18998	0.03	0.973	ALD	.0355	.1897	0.19	0.852
ASD	.1262	.04566	2.19	0.033	ASD	.1391	.1063	1.31	0.191
LFIS	.4485	.06837	6.56	0.000	LFIS	.4838	.0636	7.61	0.000
AST	.0279	.07915	0.35	0.725	AST	.0226	.0787	0.29	0.774
R-squared	0.6561				R-squared	0.5644			
F-Stat	53.19(0.000)				Wald Chi	93.78 (0.0000)			
Pesaran Test	0.924 {0.3401}				-	-			
Hausman Test	chi <sup>2</sup> <sub>(5)</sub> = 23.85, Prob>chi <sup>2</sup> = 0.0002				-	-			
-	-				Breusch-Pagan LM Test	chi <sup>2</sup> <sub>(01)</sub> = 589.07, Prob>chi <sup>2</sup> =0.0000			
Modified Wald Test for Heteroskedasticity	chi <sup>2</sup> = 6279.98, Prob>chi <sup>2</sup> = 0.000				Modified Wald -	-			
Woodridge Test for Autocorrelation	F <sub>(1, 19)</sub> = 10.763 Prob > F= 0.0039				-	-			

Source: Authors' Compilation (2023)

Table 4.4 contains both the diagnostic and regression test results. The Hausman test results conducted to decide on the appropriateness of either fixed or random effects favors fixed effect estimation as the chi-squares statistic is 23.85 with the p-value of 0.00002, which is less than the 0.05 significance threshold. However, a further test of cross-sectional dependence, heteroskedasticity and serial or autocorrelation would be necessary to ascertain non-violation of the OLS assumptions before interpreting the fixed effect model. Otherwise, the violations must be resolved to make our model useful for decision making and prediction.

The result of Pesaran CD test reveals 0.924 with p-value of 0.3401 shows the absence of cross-sectional dependence. The Modified Wald test for heteroskedasticity with a p-value of 0.000 and Wooldridge test for autocorrelation in panel data with a probability value of 0.0039 led to the rejection of the null hypothesis of homoskedasticity and no serial correlation. According to Reed and Ye (2011), serial correlation and cross-sectional dependence have long been recognized as potential problems in panel data and that Parkers’ Feasible Generalized Least Squares (FGLS) is one estimator that can handle them. Therefore, the Feasible Generalized Least Squares, FGLS, that correct for heteroskedasticity and autocorrelation is considered appropriate for our hypothesis testing and result interpretation.

**Table 4.5:** Feasible Generalized Least Squares, FGLS, Estimation Result

<i>Variable</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>T-Test</i>	<i>Probability</i>
C	3.060818	.9600628	3.19	0.001
ADE	-1.16e-06	9.64e-07	1.20	0.229
ATD	.0717482	.1232182	0.58	0.560
ALD	.0175216	.1651431	0.11	0.916
ASD	.0387469	.054864	0.71	0.480
LFIS	.7056576	.0596573	11.83	0.000
AST	-.2383544	.1851581	1.29	0.198

**Source:** Author’s Compilation (2023). R-square=0.8047, Wald chi2(6)=151.42, Prob> chi2 =0.0000

Concerning FGLS, it was discovered that ATD, ALD, ASD and LFIS exert a positive effect on gross earnings of deposit money banks and insurance companies in Nigeria, however the positive effect is only significant for LFIS against the insignificant effect of ATD, ALD and ASD to the tune of .7056576 (P=0.000<0.05) for LFIS, 0.0717482 (p=0.560>0.05) for ATD, .0175216 (p=0.916>0.05) for ALD and .0387469 (p=0.480>0.05) for ASD. Coefficient-wise, this stipulates that gross earning of deposit money banks and insurance companies would respectively increase by 0.07%, 0.17%, 0.04% and 0.71% with just a 1% increase in ATD, ALD, ASD and LFIS. Also, Table 5 shows that ADE and AST exerted a negative and insignificant effect on gross earning of deposit money banks and insurance companies in Nigeria to the tune of -1.16(p=0.229>0.05) and -0.24(p=0.198>0.05). By implication, this underlines that the gross earning of deposit money banks and insurance companies would decrease by 1.16% and 0.24%, with just a 1% increase in ADE and AST. The Wald chi2(2) of 151.42 along with p-value of 0.000 reveals that the model is fit.

**Hypothesis 2:** There is no significant effect of absolute changes in the component of capital structure on dividend per share of deposit money banks and insurance companies in Nigeria.

**Table 4.6:** Pooled OLS Estimation Result  
Series: ADE, ALD, ATD, ASD, LFIS, AST

Variable	Coefficient	Std Error	T-Test	Probability
C	6.435036	2.075658	2.27	0.006
ADE	-1.7906	7.0006	0.26	0.799
ATD	1.27804	.3038769	2.23	0.009
ALD	-1.798321	.2465164	2.23	0.000
ASD	-.299446	.9276681	0.32	0.747
LFIS	-.1183117	.300973	0.39	0.695
AST	-.1950702	.6283927	0.31	0.756

Source: Authors' Compilation (2023)  
R<sup>2</sup>=0.48889, Adjusted R<sup>2</sup>=0.4214, F-statistics=10.44, Prob(F-stat) =0.0028.

Table 4.6 revealed that ADE, ASD, LFIS and AST exert insignificant and negative effect on dividend per share in Nigeria to the tune of -1.79(p=0.799 >0.05), -0.299446(p=0.747>0.05), -0.1183117(p=0.695>0.05) and -0.1950702(p=0.756>0.05). ALD has a negative but significant effect on dividend per share of deposit money banks and insurance companies in Nigeria to the tune of -1.798321 (p=0.000<0.05). Result also revealed that ATD exerts a positive and significant effect on dividend per share of deposit money banks and insurance companies in Nigeria with the coefficient and probability values of 1.27804 and 0.009 respectively. R-square statistics reported in table 6 showed that about 48.889% of the systematic variation in dividend per share can be jointly explained by ADE, ALD, ATD, ASD, LFIS and AST while the remaining 51.111% could be accounted for by other variables not covered by this study. The F-statistics of 10.44 along the probability value of 0.0028 revealed that the model is fit.

**Table 4.7:** Fixed and Random Effect Estimates

FIXED EFFECT ESTIMATE					RANDOM EFFECT ESTIMATE				
Var.	Coe.	St. E.	T-test	Prob	Var.	Coe.	St. E.	T-test	Prob
C	19.57	9.7202	2.01	0.045	C	10.74	2.767	2.59	0.000
ADE	4.17	6.87	0.06	0.952	ADE	-4.52	6.76	0.07	0.947
ATD	.07	1.1456	0.06	0.951	ATD	.5559	1.081	0.51	0.607
ALD	-.105	1.6053	0.07	0.948	ALD	-.799	1.519	0.53	0.599
ASD	-.064	.89284	0.07	0.942	ASD	-.120	.0469	2.14	0.022
LFIS	-.920	.34774	-2.59	0.000	LFIS	-.386	.1583	2.03	0.042
AST	-.213	.66883	0.32	0.750	AST	-.136	.6291	0.22	0.829
R-squared	0.3012				R-squared	0.6244			
F-Stat	13.42(0.009)				Wald Chi	21.37 (0.0000)			
Pesaran Test	1.167 {0.4504}				-	-			
-	-				Hausman Test	chi <sup>2</sup> <sub>(5)</sub> = 9.57, Prob>chi <sup>2</sup> = 0.0885			
-	-				Breusch-Pagan LM Test	chi <sup>2</sup> <sub>(01)</sub> = 33.87, Prob>chi <sup>2</sup> =0.0000			
Modified Wald Test for Heteroskedasticity	chi <sup>2</sup> = 8.5, Prob>chi <sup>2</sup> = 0.000				-	-			
Woodridge Test for Autocorrelation	F <sub>(1, 19)</sub> = 166.857 Prob > F= 0.0000				-	-			

Source: Authors' Compilation (2023)

Table 4.7 contains both the diagnostic and regression test results. The Hausman test results conducted to decide on the appropriateness of either fixed or random effects favors random effect estimation as the chi-squares statistic is 9.57 with p-value of 0.0885, which is greater than the 0.05 significance threshold. The result of Pesaran CD test that reveals 1.167 with a p-value of 0.4504 signifies the absence of cross-sectional dependence. Hence, the assumption of OLS of no cross-sectional dependence is not violated. The Modified Wald test for heteroskedasticity with a p-value of 0.000 and Wooldridge test for autocorrelation with a probability value of 0.0000 led to the rejection of the null hypothesis of homoskedasticity and no serial correlation. This indicates the violation of assumptions of OLS in terms of static panel homoscedasticity and no panel autocorrelation. Therefore, the Feasible Generalized Least Squares, FGLS, that correct for heteroskedasticity and autocorrelation is considered appropriate for our hypothesis testing and result interpretation.

**Table 4.8:** Feasible Generalized Least Squares, FGLS Estimation Result

<i>Variable</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>T-Test</i>	<i>Probability</i>
C	3.365288	1.702104	2.30	0.004
ADE	-2.48e-07	6.40e-07	0.39	0.699
ATD	-.0668037	.1161923	0.57	0.565
ALD	.0938893	.1640656	0.57	0.567
ASD	-.0889011	.0238687	2.37	0.001
LFIS	-.2415353	.0880013	2.47	0.000
AST	-.0618724	.123694	0.50	0.617

**Source:** Author’s Compilation (2023). R-square=0.7725, Wald chi2(6)=122.07, Prob> chi2 =0.0000

Table 4.8 showed that from FGLS result, ADE, ATD, ASD, LFIS and AST exert a negative effect on dividend per share of deposit money banks and insurance companies in Nigeria, however the negative effect is only significant for ASD and LFIS as against the insignificant effect of ADE, ATD and AST to the tune of -2.48 (P=699 > 0.05) for ADE, -.0668037 (p=0.565 > 0.05) for ATD, -.0889011 (p=0.001<0.05) for ASD, -.2415353 (p=0.000<0.05) for LFIS and -.0618724 (P=0.617>0.05) for AST. This implies that a 1% increase in ADE, ATD, ASD, LFIS and AST would result to a 2.48%, 0.07%, 0.09%, 0.24% and 0.06% decrease in dividend per share of deposit money banks and insurance companies respectively. Also, ALD exerted a positive and non-significant effect on dividend per share of deposit money banks and insurance companies in Nigeria. The Wald chi2(6) of 122.07 along with a p-value of 0.000 reveals that the model is fit.

### 4.5 Discussion of Findings

The discussion of findings is based on Feasible Generalized Least Squares (FGLS). This is an estimator that solves the problems of cross-sectional dependence, serial correlation and heteroskedasticity. For hypothesis one, it was discovered in the null hypothesis that there is no significant effect of absolute changes in the components of capital structure on gross earnings of deposit money banks and insurance companies in Nigeria which could not be accepted. This is affirmed from the F-statistics value of 151.42 and probability value of 0.0000. Hence, absolute changes in capital structure determine the firms’ performance.

Specifically, it was discovered that when the model was controlled with firm size and asset tangibility, absolute changes in total debt ratio, absolute changes in long term debt ratio and absolute changes in short term debt ratio have a positive but insignificant effect on gross earnings of deposit money banks and insurance companies in Nigeria. This corroborated the findings of Muhammed (2019), that debt has no significant impact on financial performance. Invariably, this can be argued that equity is more preferable to finance the operational activities of firms in the financial industry when financial performance in terms of gross earnings is considered. However, it conflicted the findings of Yakubu, Baba and Ibrahim (2016), Terzungwe and Abdulateef (2016) and Ngwoke and Nwanneduiké (2019). They reported that borrowed funds have a significant and positive effect on corporate performance.

It is positive and insignificant probably because of the inefficiency of the management team to be productive with the available resources. The result is not consistent with the agency theory by Jensen and Meckling (1976). The theory advocates that selecting the best capital structure may diminish agency conflicts and lessen agency costs. In essence, this theory asserts that a high leverage/debt ratio aids a firm to mitigate its agency cost and reduce agency conflicts. As a consequence, the firm's worth might likely increase. On the other hand, absolute changes in debt-equity ratio, when examined with firm size and asset tangibility, has a negative and insignificant effect on gross earnings of deposit money banks and insurance companies in Nigeria. This finding was not in agreement with the findings of Nilesh (2016), Adeyemi, Unachukwu and Oyeniyi (2017) and Chuke and Kenneth (2018). They reported a positive and significant effect of debt-equity ratio on firms' performance. However, it affirmed the findings of Kayode and Adewoye (2020) that debt-equity ratio has a negative and insignificant effect on firms' performance. Concerning hypothesis two, the null hypothesis showed that there is no significant effect of absolute changes in the components of capital structure on dividend per share of deposit money banks and insurance companies in Nigeria, it was rejected since the probability value of the F-statistics is less than 0.05. By extension, this stipulates that there is a significant effect of absolute changes in the components of capital structure on dividend per share.

In relation to the predictors, it was gathered that they all exerted a negative effect on the financial performance of deposit money banks and insurance companies in Nigeria, except for absolute change in long-term debt ratio. The negative effect of absolute change in short-term debt ratio is significant as against others. The negative effect coupled with the insignificant positive contradicts the tenants of trade-off theory that explicitly clarifies the significance of a balanced capital structure that uses both equity and debt to finance business operations. It also strikes the relationship between tax marginality and leverage, as well as debt ratio and leverage which influences the profitability of a firm. Empirically, this outcome was not in alignment with the findings of Kajongwe, Bhiri and Chirovamavi (2020), that debt structure and capital requirements have a significant positive influence on the performance of commercial banks. Also, this finding is not in support of the study of Isabwa, Joel and Derek (2016) and Stella that restructuring significantly influences the performance of firms.

However, it corroborates the findings of Terzungwe and Abdulateef (2016) that capital structure has a negative and insignificant effect on firms' corporate performance.

## 5.0 Conclusion and Recommendations

In line with the established hypotheses, the following conclusions were drawn from the study:

- All the components of capital structure exerted an insignificant positive effect on financial performance in terms of gross earning, except absolute changes in debt-equity ratio that exerted an insignificant negative effect.
- absolute changes in debt-equity ratio, total debt ratio and short-term debt ratio exerted a negative effect on dividend per share. However, the negative effect was only significant for absolute changes in short-term debt ratio. Also, absolute changes in long-term debt ratio exerted a positive but insignificant effect on dividend per share.

This study, therefore, established that absolute changes in debt-equity ratio, total debt ratio and long-term debt ratio have no potency to significantly engender increase in the financial performance of deposit money bank and insurance companies in Nigeria, absolute changes in short-term debt can significantly dictates the direction of their financial performance. The following recommendations were made in line with the specific findings of this study:

- i. Since, it might be difficult for Deposit Money Banks and Insurance Companies not to have a mix of equity and debt to finance their operations, their management should place a larger emphasis on increasing equity capital by retaining earnings and/or issuing stock to get sufficient cash for funding their core business activities and expanding their branch network, which will result in increased market share and profitability.
- ii. Deposit Money Banks and Insurance Companies management should attempt to reduce the debt component of their capital structure as much as possible, as their business is more of a liability for them, and incurring a large amount of debt would put a strain on their profitability. They should also harmonize their corporate structural framework to suit their overall performance stance, this can be done by ensuring that stringent evaluation mechanisms are put in place to cross examine all performance indicators based on the framework of the corporate structural changes over time.

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