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CAPITAL STRUCTURE AND ORGANIZATIONAL PERFORMANCE IN THE NIGERIAN BANKING INDUSTRY

By

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Graduate School of Business Administration

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Statutory Declaration

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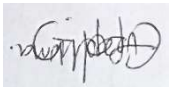
Signed:  (Student)

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Abstract

This study examines the impact of capital structure on the Nigerian banking industry from 2000 to 2022 using Ordinary Least Square analysis. A popular method for calculating the coefficients of linear regression equations that depict the connection between one or more independent quantitative variables and a dependent variable is called ordinary least squares regression (OLS) (simple or multiple linear regression). The study's two specific objectives are to investigate the impact of bonds, preference shares, common shares, and debentures on profit after tax (PAT) and the link between capital structure and bank performance. The positive connection between Bonds and PAT is significant even if the exact cause of the link is still unclear since it suggests that PAT increases proportionately to increasing Bonds. More investigation is necessary, however, since the effect of preference shares on PAT has a low degree of statistical validity. The observed positive relationship between Ordinary Shares and PAT underscores the need for cautious inference regarding causation, given the potential complexities involved. It is imperative to conduct data analysis with meticulous care, especially considering the robust linear connection between debentures and PAT. Granger causality tests reveal temporal dynamics, suggesting the presence of reciprocal effects and predictive modeling opportunities. Consequently, efforts to bolster trade flexibility, promote meticulous data interpretation, and inform banking strategy decisions emerge as key outcomes. However, to fully grasp the intricate connections between capital structure and bank performance in Nigeria, further research employing varied methodologies and extended timeframes is essential.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

A bank's capacity to meet the expectations of different stakeholders is directly impacted by the capital structure decision it makes, which determines how much debt and equity the bank utilizes to finance its operations (Damodaran, 2019). Numerous studies such as Ibenta (2022), Inanga and Ajayi, (2014), and Kester (2015) have been conducted to determine the kinds of market frictions that are most likely to affect company value since Modigliani and Miller (2012) notably said that capital structure decision is unrelated to business value in ideal capital markets. Still, the vast majority of these studies only examine nonbanking organizations. But when deciding how best to fund themselves to reach the right capital structure, businesses weigh the advantages of tax exemptions and other incentives against the danger of default. Because of this, the primary justifications for utilizing debt to fund business operations center on how expensive it is. Issuing debt also reduces administrative expenses since an underwriter is not always necessary (Pike & Neale, 2021). Kester (2015) distinguished between the two groups, contending that although an organization's capital structure may be reflected in the many ways it raises funds, the capital structure itself demonstrates the proportionate relationship between long-term debt and equity capital. Consequently, the capital structure of a bank is made up of long-term debt and equity funding.

In corporate finance, the basic reference theory of capital structure is without a doubt one of the most challenging topics. Experts have long disagreed on the best financial structure to increase a company's value (Omojefe, 2014). To simplify the issue, early research held that the costs of debt and equity were independent of capital structure and that the firm's net income was the most important metric to take into account (Osaze, 2021). However, a closer examination shows that there seem to be significant expenses related to both debt and equity.

Since Modigliani and Miller said in 1958 that a firm's choice of capital structure is unimportant in the face of frictionless markets and uniform expectations, capital structure has been a significant factor in financing economic activity. Theories attempt to ascertain if ideal capital structures exist by lowering assumptions and analyzing their effects. Over the last several decades, a great deal of

research has been done on the link between a company's capital structure and value (Stohs & Maver, 2021).

Determining whether a particular company has the optimal capital structure remains one of the most significant and challenging problems in corporate finance.

The nation's corporate sector is made up of several businesses that operate in a highly competitive and mostly uncontrolled market. The corporate environment in which businesses function has altered since the Structural Adjustment Program's financial liberalization began in 1987 (Ozkan, 2021. The monetary and fiscal policies of the government have not been stable, and the macroeconomic climate has not been favorable to business. The loan rate increased throughout the structural adjustment program; it started at 1.5 percent in 1980 and reached its highest point of 29.8 percent in 1992 (Oladeji & Olokoye, 2019). However, it fell to 16.9% in 2006. The structured financial market's cost of borrowing was probably raised by the high interest rate, which therefore raised operating expenses. The Structural Adjustment Program (SAP), which raised local demand for imported products even while domestic manufacturing was not competitive with commodities produced abroad, caused Nigeria's economy to become more open and liberalized. The situation resulted in a negative balance of payments, exacerbated by the high borrowing costs and significant depreciation of the Naira. Consequently, conducting business in Nigeria became impractical, given the excessive volatility of the currency exchange rate system (Patrick, Joseph & Kemi, 2018).

1.2 Statement of the problem

Due to a glaring research gap, many commercial enterprises, especially in developing countries like Nigeria, operate with limited insight into the intricate relationship between capital structure and firm performance. This lack of empirical evidence prompts the researcher's curiosity to delve deeper into this crucial area, given its significance for business sustainability and growth. With scant literature addressing this specific context, exploring related topics such as Capital Structure Determinants and Firm Performance offers an alternative avenue for understanding the dynamics at play. Banks, in particular, grapple with a myriad of complex factors when determining their optimal capital structure. The ongoing debate over the ideal mix of debt and equity financing

underscores the critical need for further exploration and empirical analysis in the field of corporate finance (Nwankwo, 2020).

There is a dearth of research on the link between capital structure and deposit money bank performance in developed and emerging nations. The majority of capital structure research so far has not examined how capital structure affects deposit money institution performance, but rather how it is divided into short- and long-term components and added up to total debt. By extending the scope in terms of the period covered and the number of banks involved in the data collection, this research seeks to close this gap. Banks may choose to employ debt or equity financing to optimize business performance, therefore it's critical to consider how the two could complement one another. According to Oladeji and Olokoye (2022), deposit money banks consider debt against equity when making important financial decisions on how to finance operations and assets. Research on the capital structure and organizational performance in the Nigerian Banking Industry is desperately needed. The study investigates how capital structure affects deposit money banks' performance in Nigeria.

1.3 Objective of the study

The primary goal is to find out how capital structure affects deposit money banks' performance in Nigeria. The specific objectives are:

1. To determine the influence on bonds on Profit after Tax (PAT) of Deposit Money Banks in Nigeria.
2. To examine the impact of preference shares on Profit after Tax (PAT) of Deposit Money Banks in Nigeria.
3. To examine the impact of ordinary shares on Profit after Tax (PAT) of Deposit Money Banks in Nigeria.

1.4 Research Questions

This study has deliberated on the issues affecting capital structures and deposit money banks which has further led to the following research questions being asked:

1. What is the effect of Bonds on Profit after Tax of Deposit Money Banks in Nigeria?

2. To what measures do Preference Shares have on the Profit After Tax of Deposit Money Banks in Nigeria?

3. How does Ordinary Share affect Profit after Tax of Deposit Money Banks in Nigeria?

1.5 Research Hypotheses

The following hypotheses, which are stated in their null form are developed using the research questions and goals to address the study's main objective:

H_o1: Bonds do not affect the profit after tax (PAT) of Nigerian deposit money institutions.

H_o2: Preference Shares have no effect on Deposit Money Banks' Profit after Tax (PAT) in Nigeria.

H_o3: The profit after tax (PAT) of Nigerian deposit money institutions is unaffected by ordinary shares.

1.6 Scope of the study

This study focuses on the Impact of Capital Structure on the Performance of Deposit Money Banks in Nigeria between 2000 and 2022. It utilizes a secondary data usual technique to obtain data and covers twenty-two years of time series data. Geographically, Nigeria is the study's primary point since it is one of the developing countries where not much pertinent research seems to have been done. This research used all of the Nigerian Deposit Money Banks listed. These

include First Bank of Nigeria, Citi Bank, Heritage Bank, Keystone Bank, Standard Chartered Bank, Sterling Bank, Unity Bank, Wema Bank, First Bank of Nigeria, Zenith Bank, Guaranty Trust Bank, Fidelity Bank, First City Monument Bank, Union Bank of Nigeria, and Access Bank (which purchased Diamond Bank). All of the used banks are located in Lagos State since it is the largest commercial city or state in Nigeria. The research's data sources would include the selected banks' financial statements and the CBN Statistical Bulletin 2022.

1.7 Limitations of the study

To gather sufficient information on the relationships and correlations between the numerous variables pertinent to capital structure and deposit money banks, this study was created to include all variables that are used as indicators of the capital structure and performance of deposit money banks in Nigeria. The planned breadth cannot be achieved since the study subject regrettably restricted its scope to the Performance of Deposit Money Banks, which is just within the banking sector in the Nigerian economy. Moreover, not all industries have sufficient data to show significant differences. Only the measurements used by Deposit Money Banks on the Nigerian Exchange (NGX) could adequately depict these capital arrangements. The capital structure of Deposit Money Bank was the main focus of the study. Each of these deposit money institutions owns the bonds, common shares, and preference shares indicated above. Furthermore, because of their little profit after taxes, assessing the performance of these deposit money institutions is difficult. Even though a wide range of factors may affect these two variables, this research will solely focus on them for twenty-two years.

1.8 Significance of the Study

A company's existence is not limited to its stock. However, since they are ignorant of the numerous benefits of debt financing, many organizations depend on equity to be self-sufficient or strive for a capital structure with low debt. Some firms don't care how capital structures are built up as long as they are successful today and in the future; others see capital structures as just theoretical concepts that don't need or justify formal design. Following this investigation, nothing would stay the same.

The results of the study build on previous research on the relationships between debt financing and share price, profits per share, and investors' capacity to defer paying taxes. Moreover, it significantly advances the field of study on capital structure in the Nigerian Banking Industry by highlighting the ambiguity surrounding the use of Earnings per share as a performance metric.

This study project will be very beneficial to the following individuals:

Management: It is particularly useful for Deposit Money Bank management as it highlights the advantages of both debt and equity financing in various economic situations. The administration of a company is in charge of carrying out inquiries and making financial decisions. Thus, by being aware of these outcomes, they will be able to make wiser choices.

The General Public: People in general, especially those who want to invest in the banking sector, are immediately impacted by the way Deposit Money Banks conduct their business. The public is an organization's main source of stakeholders. The general public must thus be aware of the capital structure choices that are made.

Investors and business professionals: Bondholders, stock investors, and any other person who has invested in any of the several deposit money institutions fall under this group. They must understand the consequences of their decision.

Researchers and Academics: This research contributes to the current capital structure debate.

In summary, this study is important and useful for researchers and students studying finance. These few elements are sufficient, but overall, their value cannot be emphasized.

1.9 Definition of terms

A list of important terminology from the study is provided below, along with definitions: When banks need to raise capital to grow, they sell bonds to the general public as a long-term capital structure fund.

Capital structure: The company intends to use loans, ordinary stock, bonds, and preferred shares as a portion of its funding sources.

Debt: These loans, which are also known as company borrowings, are separated into two categories: capital structure-related short-term loans and long-term loans.

Equity: It is the sum of money originally given to a company in return for stock shares.

Common Stock: The company may obtain capital by offering to sell the public or private investors the opportunity to purchase its stock. The capital budget provides funding for it. **Preferred stock**, also known as preference shares, are equity shares of a business that pay dividends to shareholders ahead of time compared to common stock. Investors will be paid first as a priority regarding business assets if the firm files for bankruptcy. Common equities may not usually have a set dividend, but preference shares often do. While regular shareholders often can vote, preferred stockholders may not.

Profit after taxes, or PAT, is the remaining sum that businesses get after all costs have been paid. It serves as a performance indicator for businesses and shows the amount of profits that have been withheld from taxes.

CHAPTER TWO

LITERATURE REVIEW

2.1 Preamble

This chapter provides a review of existing literature which contains a conceptual review, theoretical review, and empirical review of the study.

2.2 Conceptual Framework

This research primarily seeks to determine the capital structures of Nigerian banks and their profitability. The first, second, third, and fourth sections will review the appropriate empirical literature, and the relevant hypotheses of this research will be drawn. The following section will cover the theoretical framework. The final section is a summative conclusion of the chapter.

2.2.1 Overview of Deposit Money Banks in Nigeria

The impetus for the current developments stemmed from the imperative to fortify the banking industry and elevate its role in fostering sustained economic growth, as highlighted in Harward's (2022) report. This drive for reform commenced in 2004 with the initiation of the bank consolidation initiative. Imala (2014) contends that one of the primary objectives of the regulatory adjustments was to recapitalize banks. To streamline the revenue-generating processes of banks and other financial institutions, the Central Bank of Nigeria (CBN) introduced the automated Electronic Financial Analysis and Surveillance System (E-FASS). Furthermore, a flexible interest rate-based framework was implemented, with the Monetary Policy Rate serving as the system's operational target. Other key focus areas included the adoption of a risk and rule-based regulatory framework, stringent enforcement of corporate governance principles in the banking sector, and the review and revision of relevant laws to ensure effective corporate governance and foster greater accountability and transparency in the implementation of banking regulations. This strategic approach enables CBN to proactively address inflationary pressures while also stabilizing the money market and improving the payment system. Notably, the corridor regime has played a significant role in reducing the volatility of interbank rates, thus contributing to overall market stability.

Banking System Integration

According to Soludo (2011), the CBN sought to integrate the banking industry into global best practices for financial reporting and transparency by implementing the International Financial Reporting Standards (IFRS) in the Nigerian banking sector by the end of 2010. Since they reduce the likelihood of unwarranted contagion, promoting market discipline and minimizing uncertainty are the main objectives.

New Banking Model

The Universal Banking (UB) model, which was adopted in 2001, allowed banks to grow into non-bank financial firms. The plan for banking consolidation resulted in an influx of cash, which led bank management to prioritize venture capital and equity funds above conventional banking protocols. The Central Bank reviewed the UB model in response to the expressed concerns and told banks to focus only on their primary banking responsibilities. The nation's licensed banks are allowed to engage in the following types of operations under the new model:

(i) Approval for local, national, or worldwide commercial banking.

(ii) Investment and merchant banking iii. Specialty banking, including local and national non-interest banking, mortgages, and microfinance.

Development Finance Institutions

The objective of financial inclusion is expected to be advanced when non-interest banking is introduced into Nigeria's financial system since it is expected to improve the nation's financial markets and attract new institutional investors. Nigeria's first fully authorized non-interest bank, Jaiz Bank Plc, commenced operation on January 6, 2012.

According to Soludo (2011), microfinance is crucial in developing nations like Nigeria because it may address problems of financial exclusion that have kept a sizable section of the population from fully engaging in the economy. As of December 2011, there were 24 banks, including 5,789 branches, and 816 microfinance banks, adding up to a total of 6,605 branches.

There is a pronounced degree of financial exclusion, with 24,224 bank branches relative to the total population. According to a 2010 research by Enhancing Financial Innovation and Access

(EFINA), 46.3% of Nigerians remain financially excluded. This is more than the numbers in South Africa (26%), Botswana (33%), and Kenya (32.7%).

Thus, the CBN made it possible for the Microfinance Development Fund (MDF) to be established in 2012 to provide Microfinance Banks (MFBs) and Microfinance Institutions (MFIs) greater access to long-term, low-cost funding sources. There will be social and economic components to this fund. This will support MFBs and MFIs in their endeavors to broaden their customer base and enhance their operational efficiency.

Because of this, the CBN is considering establishing a special fund by year's end that would only provide women with single-digit interest-rate loans.

Payment System

The "Cash-less" policy was introduced by the Central Bank of Nigeria (CBN) in an attempt to improve the country's payment system and solve issues with currency management. Nigeria's economy's over-reliance on cash has raised the operating expenses for the banking sector, which are then passed on to customers in the form of higher loan rates and service fees. The enormous expenses associated with processing, sorting, shipping, and producing banknotes daily make these expenditures noteworthy. By 2012, it is anticipated that the industry's direct cash management costs will total ₦192 billion.

On average, 90% of bank customers take out less than ₦150,000. The substantial increase in cash management costs that the remaining bank customers must pay may be mostly attributed to the 10% of bank customers who make withdrawals over ₦150,000. A high rate of theft, a rise in unethical behavior, and a tendency for the general people to handle money inappropriately are additional concerns connected to the cash economy.

The CBN is collaborating with the Bankers Committee to establish a setting where a growing percentage of transactions are made using checks and electronic payments, in line with worldwide trends. Notably, via the clearing procedure, checks may now be used to pay up to ₦10 million (Soludo 2011).

Completion of the Recapitalization Exercise

Yasdani (2012) asserts that for rescued banks to remain competitive in the market, they must combine. As a result, the banks signed five Transaction Implementation Agreements (TIAs). The

acquisition of the banks and the merger were formally authorized by the CBN. The eight banks that the CBN had saved saw the end of their cumulative negative asset value when the Asset Management Corporation of Nigeria (AMCON) finished funding the three new banks and the five existing institutions finished their legally mandated TIAs. Thus, the recapitalization process was finished by 2011 for the five saved banks that had approved the TIAs.

Reforms Effect

The current wave of banking reforms has produced several outcomes, such as The banking sector embracing a fresh perspective as they use best practices in corporate governance and risk management. The public disclosure of transactions and transparency have significantly enhanced.

According to Soludo's (2011) most recent financial statement results, several banks have made corrections to their balance sheets and are now turning a profit. Banks are gradually starting to lend to the private sector again, and the banking system now has almost ₦1.7 trillion more cash on hand than it had before AMCON bonds were released. They have also made significant progress in redirecting single-digit annual percentage rate (APR) loan payments to the electrical industry and small and medium-sized enterprises (SMEs). These measures have resulted in thousands more jobs being created in the economy than there were before.

A corporate governance code has been published by the CBN. Bank CEO terms are limited to a maximum of 10 years in office. Furthermore, all CEOs who would have held that post for a decade had tendered their resignations and handed over their roles to their successors by July 31, 2010.

Because of the changes, the disparity between lending and deposit rates has shrunk; at the end of December 2011, it was 9.7% as opposed to 12.2% in 2010. Several Nigerian banks are included in both the top 1000 global and top 20 African banks. As a result, the country's macroeconomic stability has been preserved, and as of the end of December 2011, inflation has dropped to 10.3%.

In contrast to previous times, there has been less volatility in exchange rates in the foreign currency market. The premium is between the world average and 5.0%.

Because problematic institutions have gone and a corporate governance code has been put in place, the adjustments have increased public trust in the financial sector.

More Nigerians are using the internet to make payments.

Banking Reforms and the Challenges

Notwithstanding their remarkable success, Nigeria's financial reforms encountered several difficulties. The primary issue is that it's unclear what the modifications are supposed to achieve. Expanding the range of financial services provided by Nigerian banks, with a focus on specialized or non-interest banking, is the aim of the new banking model's implementation. But now it's tinged with religiousness. Potential investors may be discouraged from joining the banking business due to the false impression and fierce opposition to the regulation (Odufu 2021).

Nevertheless, despite the potential for economic growth and well-being as well as the worldwide trend in the intensity of e-payment use, the cashless policy has come under heavy criticism.

Doing business in Nigeria is more expensive than in many other developing and growing nations because of its poor infrastructure amidst the high employment rate in the country.

Up until recently, hiring new employees was only done to satisfy legal requirements; on the other hand, training was seen as an expensive, pointless non-revenue activity.

Put another way, the banking industry is essential to the operation of any given economy and has to adapt constantly to stay strong. The majority of the few successes that have been officially recorded most likely came about as a consequence of improved cooperation and conscious effort on the part of important participants. Thus, the CBN will keep working to sustain reform measures to create a strong and thriving banking sector (Murthy 2015).

2.2.2 Capital Structure

According to Alfred (2013), a company's capital structure indicates the proportion of debt and equity that make up the organization's overall capital structure. A company's financial structure and its capital structure are two distinct entities, according to Pandey (2012). The spectrum of methods used to acquire capital is referred to as the latter, whilst the former represents the proportional connection between long-term debt and equity. According to Inanga and Ajayi (2014), a company's capital structure is made up of all of its long-term funding sources, except for short-term financing. As a consequence, the mix of debt and equity capital used to finance an organization's assets is known as its capital structure. Notwithstanding, one of the most significant and challenging problems in corporate finance is determining if the ideal capital structure really exists.

Selecting the appropriate capital structure is a crucial choice for every business. The choice is grounded on the need to optimize returns for diverse organizational stakeholders and the firm's capacity to oversee its competitive landscape. It is widely believed—first articulated by Modigliani and Miller in 1958—that the ideal capital structure exists, one that strikes a balance between the tax benefits of debt and the possibility of bankruptcy. When this capital structure is implemented, investors should get higher returns than they would from an all-equity company.

A company's capital structure is made up of its debt and equity arrangements. It's often known as the process via which a company funds its assets by using a mix of debt, equity, or hybrid securities, or both. The makeup of a company's obligations then dictates its capital structure. According to Inanga and Ajayi (2014), a company's capital structure might include three different forms of capital: preference capital, equity capital, and long-term loan (debt) capital. Contributed capital, or funds initially invested in the firm in return for stock shares, and retained profits, or funds held onto by the company from prior years to support corporate development, acquisition, and expansion, comprise equity capital. Debt capital is the phrase used to describe the long-term bonds that a firm raises principal on and pays interest on to finance its investment choices. Preference capital is a hybrid that includes the features of debentures and equity shares but without the advantages. According to Akintoye (2022), choosing an appropriate capital structure is a crucial decision for all forms of business entities. This choice is influenced by the organization's capacity to manage its competitive environment and the need to maximize returns to various organizational components. The predominant view is that there exists an ideal capital structure that balances the risk of bankruptcy with the tax benefits of debt, as initially articulated by Modigliani and Miller (2012). When building this capital structure, investors should see higher returns than when investing in a stock company.

In theory, utilizing contemporary finance techniques, senior management ought to be able to pinpoint the ideal debt-to-equity ratio for each given business. Several studies have shown that the majority of firms lack an ideal financial framework. This is due to the fact that managers often lack motivation to increase their pay since it has little impact on the company's performance. Furthermore, managers are very likely to go beyond and live an opulent and comfortable lifestyle since they do not get a portion of the earnings from shareholders. Therefore, the principal-agent dilemma must be solved if owners are to ensure that managers operate the company to maximize value rather than squander its resources (Bokpin & Isshaq, 2020).

In recent years, capital structure has drawn more attention from scholars and researchers. Most studies have examined how companies have raised money via the issuance of bonds, shares, debentures, and other long-term loans in order to fund operations and boost earnings (Patrick, Joseph & Kemi, 2013). Other studies indicate that the gearing ratios of most firms have an influence on their operational performance. It can take some time until the company's earnings alter if the ratio keeps rising (Ozkan, 2021). A company's gearing ratio and liquidity ratio have a constant influence on its profitability, which is a performance statistic, according to data collected by financial experts. By presenting empirical evidence in favor of the origins and effects of modern capital structure theories on corporate performance, this study addresses the question posed in the literature mentioned earlier.

A thorough assessment of strategies to reduce company failure and increase the role of companies in the country's economic growth is required, given the importance of businesses to Nigeria's economy and the cyclical nature of Nigerian organizations. According to Akinyomi (2013), firms should make financial decisions with the aim of achieving the optimal level of capital structure since doing so would increase their overall value and improve their performance. The main argument is that most capital structure problems are the same across different countries and regions, even with changes in institutions; this argument is not supported by any actual data.

According to Chandrasekharan (2020), businesses should exchange debt for equity or equity for debt and should continue doing so until the firm's value is maximized. Applying excessive amounts of outside funding might give the business too much authority since it would put a lot of responsibility on the funders, which could have a bad effect on performance and operations. This level of structure is ideal, even though experts cannot agree on the best capital structure to boost business value. As per Owualah (2019), the discourse around the ideal capital structure has advanced beyond weighing advantages and disadvantages to include determining the most effective capital structure for a certain organization and appreciating the core components that propel its prosperity. He asserts that the fundamental impacts on businesses vary per nation.

According to Oladeji and Olokoye (2021), the wealth maximization rule is predicated on the idea that a business has an ideal level of capital structure, or the point at which taking on outside financing is risky and profit-sharing is permitted. Given that return on equity is a variable, it's critical to determine how various capital structure components affect a company's profitability.

2.2.3 Optimal Capital Structure

The income statement of a firm shows how various financial structures and business risks impact the organization. Changes in operational leverage magnify the impact of changes in sales since they cause a greater shift in operating income (Earnings before Interest and Taxes - EBIT)% than they do in sales.

According to Akintoye's (2022) study, capital structures, preferred stock, and common equity are often used by businesses to generate the necessary money. The ideal capital structure strategy should aim for a careful and informed balance between risk and return since it entails a strategic trade-off between projected return and risk. Business risk, tax laws, financial flexibility, and the management team's level of aggressiveness or conservatism must all be considered by the corporation. Operating circumstances may cause a difference between the ideal and real capital structures, even if these aspects are essential in developing the desired capital structure.

2.2.4 Capital Structure, Firm Value and Performance

Any business entity must make an important decision about its financing arrangement. The decision is made considering an organization's ability to manage its competitive environment as well as the need to maximize returns for various organizational stakeholders. The prevailing opinion, first expressed by Modigliani and Miller (2012), is that there is a perfect capital structure that reconciles the tax advantages of debt with the risk of insolvency. Investors who construct this capital structure should get larger returns than those who invest in a stock corporation.

It was argued that using leverage to penalize managers or obtain financial gain is a band-aid solution that, in many situations, might be disastrous for a company. The failure to identify the optimal capital structure is an indication that the logic is flawed.

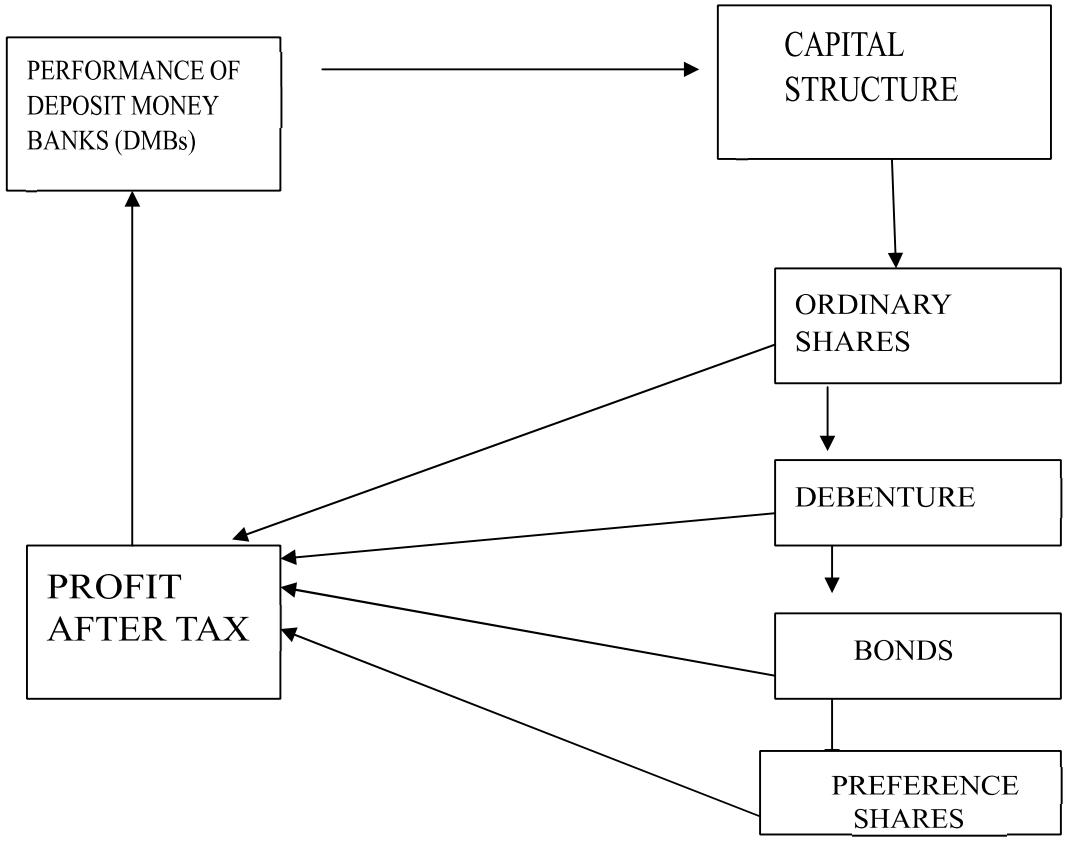
Modigliani and Miller (2012) contend that because interest payments are tax deductible, debt should be the sole component of a company's appropriate capital structure. According to Stohs and Maver (2021), bankruptcy costs actually exist in practice and are worse when debt is used in place of equity, even if the Miller and (MM) model may be true in theory. Consequently, they argue that the optimal capital structure is reached when the marginal cost of bankruptcy equals the marginal benefit from tax sheltering, which is provided by an increase in the debt ratio. Thus, capable managers must recognize this optimal capital structure and maintain it over time. They will be able to reduce financing costs and the weighted average cost of capital (WACC) and

maximize the company's performance and value by doing this. In theory, top managers should be able to accurately calculate the best trade-off between equity and debt for each company in reality, even though numerous studies have shown that most businesses do not have an optimal capital structure (Barclay & Smith, 2020). This is because modern financial methodologies make this possible and managers often have little incentive to raise their compensation since it has no impact on the company's success. Moreover, because managers do not get a part of the profits from shareholders, there is a high likelihood that they will increase spending by going overboard and living a luxurious and convenient lifestyle. Hence, shareholders' main concern is ensuring that managers run the business to maximize value rather than waste its resources, which necessitates finding a solution to the principal-agent problem (Damodaran, 2019).

2.2.5 Conceptual Model

The conceptual ideology of Itseuwa & Uwaleke (2019), who said in their book that an organization's capital structure is always defined by the composition of the investment funds it employs to operate its business, is the foundation of the conceptual framework model. The business will be able to ascertain if the actual capital funds invested will turn a profit at the end of the year by doing this. At this point, Itseuwa & Uwaleke (2019) evaluate the performance of deposit money institutions using Profit after Tax. They continue by saying that these deposit money institutions' capital structure and performance are assessed according to how well they are doing. These DMBs may demonstrate the makeup of their capital structure and draw cash to invest in companies that would ultimately benefit from the capital market by joining the Nigerian Stock Exchange (NSE). This is seen in the following picture, Fig. 2.2.5:

Fig. 2.2.5 THE CIRCULAR FLOW OF CAPITAL STRUCTURE AND PERFORMANCE OF DEPOSIT MONEY BANKS (DMBs).



Source: *Itseuwa & Uwaleke (2014) An Insight into the Nigerian Capital Market.*

2.2.5.1 Ordinary Shares and Performance of Deposit Money Banks in Nigeria

Ordinary shares are funds acquired by businesses via individuals and corporate associations to create a new or existing business to reward these investors who take on risk with profits. Over the years, financial experts and economists have made similar suggestions. For these investors, there is no fixed amount. Not to mention, if the firm files for bankruptcy and the owners of these shares do not get a dividend, they might lose money. The annual dividend, which is paid during the period in which the company's financial report is calculated at a loss, is the only benefit that ordinary shareholders receive from their investments in companies that trade on the capital market. Ordinary shareholders buy common shares from these companies. Nonetheless, common shareholders are sometimes referred to be the company's owners because of the kind of risk they assume while running the business. Companies that are registered and active in the stock market

offer common shares, which investors buy at market value (Osiegbu, Nwakanma & Onuorah 2018).

According to Onyechie (2010), an equity ownership in a firm is a share of the company's assets plus a share of any profits made from those assets after other claims have been paid. Equity investors are the company's proprietors. They purchase what are referred to as common shares. The money is used by the company to buy assets. The assets are used to create profits, and the common shareholders own the earnings regardless of whether they are paid out as dividends or reinvested in the business.

2.2.5.2 Debenture and Performance of Nigeria Deposit Money Banks

A corporation may borrow money from the public by issuing certificates with a defined period and interest rate if it wants to generate capital for growth and expansion but isn't yet ready to issue shares.

These are the equities that governments, government-affiliated companies, limited liability companies, and government parastatals sell on the capital market. For a certain period of time, this kind of stock is offered at a fixed interest rate. Because of the corresponding security qualities, bonds are the safest kind of shares that investors can purchase at any price. In recent times, bonds marketed primarily to investors, governments, and corporate entities have typified the Nigerian capital market. These investors now feel more confident entering the market and buying these bonds as a result. Seeking bonds considerably enhances a company's performance and liquidity, which raises profit, claim (Osiegbu et al, 2018).

Ibenta (2022) defines a bond as a written undertaking by a business entity to reimburse the registered holder or bearer of the bond with a certain amount of money on a designated date. It is a promissory note that is similar to other legal promises and is issued by a publicly traded corporation or government entity.

According to Helfert (2012), a bond is a component of a complex contract or agreement between the bond holder and the issuing firm. Each participant in the arrangement has made commitments, which form the foundation of any such contract or agreement. According to Rock (2012), the bondholder consents to provide cash to the business in exchange for the firm's promise to return the borrowed funds at a certain future date. Second, the corporate body will pay the bond's bearer or holder regularly at a predetermined interest rate. The idea behind periodic interest is that it

symbolizes the cost incurred by the company to persuade the bondholder to give up his money for an extended period, so depriving him of alternative options.

Lyon (2020) and Fry (2021) state that the initial loan amount is equal to the bond principal or par value. The indenture contains more information about the bond's terms and conditions as well as the principal repayment date. This agreement contains the corporate entity's covenant as well as all the bondholders' rights.

Numerous research works have examined the financial rationale for bond issuance. According to Romer (2013), the traditional macroeconomic justification for the issuance of certain bonds is that bond financing is less expansionary than money finance and that growth is sometimes undesirable. On the other hand, the most compelling tax argument in favor of bonds is the potential for bond issuance to encourage people to postpone consumption to save money or create jobs.

There are many reasons why bonds are issued at the microeconomic level. Debt markets are used by corporate borrowers to purchase new equipment and working capital. Freear (2010) asserts that a major contributing element in the decision of many business owners to choose debt financing is their need to maintain control over their company. Bond investors often have minimal direct power over the corporation, unless certain indenture rules limit their ability to make decisions. Stated differently, the owners are more willing to pay the higher interest costs associated with the loan stock.

Since Nigeria's bond market includes both government and corporate securities, it may be divided into several categories, such as Treasury bonds (TBs), Federal Government Development Stock, Treasury certificates (TCs), and development bonds issued by state and municipal governments are examples of government securities in this context.

An alternative classification approach divides the instruments into medium- and long-term bonds based on the temporal component. As a result, an organized market for standardized marketable loans with medium- to long-term maturities is what is known as the bond market. The mature period might extend to 25 years, or it could end after only 5 years.

Bond Indenture

Guy (2013) made the point that a bond indenture often contains guidelines governing bond issuance, such as operational effectiveness and thrift, which will increase the business firm's ability to turn a profit as well as its propensity to save.

Trustee

(i) Three parties are involved in a bond indenture: the issuing company, which acts as the borrower; the bondholder or owner, who acts as the creditor or lender; and the trustee, which represents the interests of the bondholders. The trustee acts as a proxy for the shareholders, safeguarding their interests much like the board of directors of a contemporary business. The issuing corporate company chooses the trustee before the bonds are issued, even though he represents the bondholders. A wealthy person or a financial organization, such as a trust business or investment banker, might serve as the trustee. A trustee is accountable for several tasks.

(ii) He verifies that all legal conditions have been met before authorizing the bond issuance. To make sure the conditions and clauses of the indenture are followed, he looks into the company's assets and financial records.

(iii) He ensures that the company files its taxes and has the appropriate property insurance in place.

(iv) He confirms that the company correctly deducts interest from monthly payments and sinking fund installments. In the case of a default, he is required to inform the bondholders and, to the degree specified, safeguard their interests.

Classification of Bonds

Bonds may be divided into several categories according to the assets or securities pledged for them and the industry in which the company issuing the bond operates.

The primary bond types that may be found in the bond market include corporate, government, mortgage, real estate, public utility, industrial, and collateral trust bonds, among others, according to Phillips (2013).

2.2.5.3 Preference Shares and Performance of Nigeria Deposit Money Banks

Since preferred stock may have any combination of characteristics not seen in normal stock—such as characteristics from both an equity and a debt instrument—it is sometimes referred to as a hybrid instrument. Preference shares, preferred shares, or just preferred are common terms used to describe preferred stock. Preferred stock or common shares may be given preference during

dividend payments and asset sales. Despite being rated higher than common stock, preferred stocks are entitled to a lower portion of the company's assets than bonds. The company's articles of organization provide the conditions for the preferred stock (Drinkard, 2014).

Preferred stocks are assessed by the main credit rating agencies, much like bonds. Because preferred dividends are not as certain as bond interest payments and because all creditors' rights supersede those of investors, preferred stocks are often rated lower than bonds.

Preference in Dividends

Dividend payments to preferred shares are often made first. The preference does not ensure dividend payments, even if the business is required to pay the prescribed dividends on preferred stock before paying any dividends on common shares.

Preferred stock that is either cumulative or non-cumulative is offered. When using a cumulative preferred, a company must make up any dividends that are underpaid at the designated rate or that are missing altogether. Dividends are accrued for each payment period that has passed, whether it is quarterly, semiannually, or annually. If a dividend is not paid on time, it has "passed"; the dividend in arrears is equal to the sum of all passed dividends on a cumulative stock. This feature is absent from non-cumulative, or straight, preferred stock; dividends that are passed but not declared are forfeited, (The Kieso Collective, 2007).

Preferred shares, also known as the fixed liquidation value, may or may not be connected to the par value. Unless otherwise agreed upon, preferred stock has a claim on a stock corporation's liquidation earnings equal to its par (or liquidation) value. This is an illustration of the capital that was allotted to the company when its first shares were issued. The common stock's residual claim is superseded by this claim. The allocation of most preferred shares is chosen throughout the negotiating procedure. Typically, the dividend is stated as a set amount or as a percentage of the par value (Gideon Investments Co. 6% Series A Preferred, for instance). Preferred share dividends may sometimes be configured to be floating, meaning they might fluctuate in reaction to changes in a benchmark interest-rate index, like LIBOR in London. Certain preferred shares may have voting rights even while the majority do not if preferred dividend payments are postponed for a considerable amount of time. Certain preferred shares are subject to special voting rights that must be used to choose directors or approve extraordinary actions like issuing additional shares or

approving a firm purchase. The rights assigned to the preferred shares at the moment of formation control everything.

Preferred shares, like other types of agreements, may correspond to practically any form of right that can be imagined. Preferred shares issued in the United States sometimes include call provisions, which provide the issuing company the option to buy the share at its (typically restricted) discretion.

Types of Preference Shares

There are more alternatives in the preferred stock market than simply pure preferred stock. Additional types of preferred stock include:

Offers for Preferred Stock: A lot of companies often make a lot of offers for preferred stock, concentrating a lot of attention on a single issue. If the corporation's finances are not enough to meet the preferred issue's distribution schedule, it pays the dividends on the preceding preferred. Due to their reduced credit risk, older preferred stocks may yield less than newly issued preferred stocks.

Preference Preferred Stock: Preference preferred stocks are arranged according to seniority, with the preferred stock that comes before them taking precedence. Except for those that were previously prioritized, these concerns have priority over all other classes, as determined by the firm. When a company chooses many challenges, the issues are ranked according to seniority. The next highest priority is assigned to the senior concern, and so forth.

Convertible Preferred Stock: Owners of preferred stock have the option to exchange their holdings for a certain number of common shares of the business. Regardless of the common shares' current market value, the investor is free to exchange them at any time. It is a one-way transaction to convert ordinary stock back into preferred shares. Due to agreements that investment banker Stan Medley secured on behalf of more than forty publicly traded companies about different anti-dilutive convertible preferred, this option has become more and more popular in recent years. Stan Medley thinks that the preferred share is either a percentage of the company's common shares or

a certain monetary value of common shares, as opposed to having a fixed number of common shares. Participants in the OTC market handle a significant amount of shorting and dilutive actions.

Cumulative Preferred Stock: The money will be held for a later time if a dividend is not paid.

Exchangeable Preferred Stock: Stocks that satisfy this condition may be exchanged for other types of investments.

Participating Preferred Stock: Preferred share owners may be entitled to extra dividends if the company meets certain financial requirements. Investors who purchased these stocks will receive a monthly dividend regardless of the company's performance (provided it performs well enough to meet its annual payment commitment). If the company reaches certain sales, profit, or profitability benchmarks, investors get a bonus dividend.

Perpetual Preferred Stock: Incentives are paid back to investors by a certain date, but the company has the option to redeem this kind of preferred stock. Alternatively, several types of preferred stock could be issued with no redemption date.

Puttable Preferred Stock: In certain situations, holders of preferred stock may "put" pressure on the issuer to redeem their shares.

Monthly Income Preferred Stock: Preferred stock and subordinated debt are combined in this structure.

Non-cumulative Preferred Stock: Typically found in bank preferred stocks, these preferred equities are required by the Bank for International Settlement (BIS) Basel Committee to be included in Tier 1 capital and do not accumulate dividends if they are not paid.

A kind of stock known as "super voting stock" allows investors to exercise more voting rights than they may expect from a different class of stock that the same company offers. It enables a corporation to be managed by a small group of investors. Super-voting shares are often utilized to give well-known business insiders more internal voting rights, influence over the board, and authority over day-to-day operations. Super-voting shares are a powerful barrier against hostile takeovers because they enable well-known insiders to maintain majority voting power over their company without actually owning more than half of the current shares.

Advantages of preference shares

1. No Dividend Obligation: A business is not obligated to pay a dividend on preference shares if its profits for a particular year fall short of expectations. The dividend may also be postponed in the case of cumulative preference shares. There is no constant strain on its budget.

2. No Interference: Voting rights are sometimes not affixed to preference shares. As a result, a company may obtain capital without giving up control. The company is solely governed by the equity investors who own its shares.

3. Trading on Equity: The dividend rate on preference shares is fixed in advance. Because of its higher profitability, the company is now able to provide the equity owners with the benefits of equity trading.

4. No Charge on Assets: Preference shares do not mortgage or in any other manner charge the company's assets. In the future, the company may still take out loans secured by its fixed assets.

5. Variety: Several preference share types may be issued, based on investor needs. Participating preference shares or convertible preference shares may be provided to attract bold and enterprising investors.

2.2.5.4 Profit after Tax (PAT) as a Measure of Banking Performance

The primary motivation behind deposit money banks' operations is to decrease costs to raise income. The profit after tax is a proxy for performance as a measure of deposit money institutions in the Nigerian economy. Investors use it to gauge the standard of operation these companies are running at after their capital market funding purchase. The yearly revenue of any deposit money bank is subtracted from its operating expenses, interest, and taxes to determine its profit after taxes (Nwankwo, 2020).

2.2.6 Determinants of Banks' Capital Structure

Numerous internal and external variables might affect a bank's capital structure. The primary external variables influencing a country's capital structure are macroeconomic ones, such as the state of the capital market, the rate of inflation, and the tax laws in place. Enterprise capital structure is also impacted by the attributes of a certain firm, which are called micro factors (internal) in this context. This section explains how micro-factors impact a firm's capital structure using the pertinent capital structure theories from the theoretical framework:

Measurements: The positive correlation between a firm's size and capital structure may be explained by the bankruptcy cost hypothesis. Remmers, Stonehill, Wright, and Beekhuisen (1974) assert that large firms have more diversification, better access to the capital market, higher credit ratings for debt issuance, and lower interest rates on borrowed capital (Pinches & Mingo 1973). Moreover, a lower bankruptcy rate for bigger businesses translates into a lesser risk and expense associated with declaring bankruptcy (Titman &Wessels 1913). According to the bankruptcy costs hypothesis, debt levels increase while bankruptcy costs decrease. An empirical research conducted in the 1970s that demonstrated a positive correlation between capital structure and business size provided support for this idea (Martin and John, 1988). However, the outcomes of some actual research contradict this theoretical relationship.

Growth Rate: The paradoxical relationship between growth rate and capital structure may be explained by the agency cost theory and the pecking order hypothesis. According to agency cost theory, equity-controlled companies often make less-than-ideal investments in an attempt to get bondholders' money. Companies in expanding sectors are probably going to spend more on agency fees since they have more possibilities for future investments. For example, if management issues securities, the Pecking Order Theory predicts that it would choose debt over equity and internal over external financing (Myers 2001). According to the pecking order idea, rising businesses have a larger percentage of debt in their capital structure than do stagnant businesses. The findings presented by Chung (2021) and Chaplinsky and Niehaus (2018) refuted the pecking order idea.

Profitability: According to Myers (1984), the static trade-off theory explains why hazardous enterprises have minimal debt capital. Higher profitability for businesses is closely connected with greater debt capacity and lower risk for loan holders. This implies that capital structure and

profitability are positively correlated. However, the pecking order theory contends that there is a negative correlation with this relationship. As previously mentioned, the company favors internal financing and has a sticky dividend policy. Debt financing is chosen over equity financing if the company's owned resources are insufficient to meet its financial obligations (Myers 2001). Because of this, the company's increased profitability suggests that investments would be financed internally rather than via debt (Aremu, Ekpo, & Mustapha 2021).

Dividend Distribution: The dividend payout ratio and the amount of debt in the capital structure have a negative correlation, according to the bankruptcy costs hypothesis. A low dividend payment ratio implies a low likelihood of liquidation and increases the equity basis for debt financing. The expense of filing for bankruptcy is negligible due to the low likelihood of filing. According to the notion of bankruptcy costs, a low bankruptcy cost signifies a high degree of debt within the capital structure. However, the dividend payout ratio and debt level are positively correlated, according to the pecking order hypothesis (Titman & Wessels 1988). This hypothesis states that management favors internal funding over outside funding. Rather of giving out a large dividend and taking out loans to cover the shortfall, management keeps the profits. Given this, a smaller dividend pay-out ratio is indicative of a lower degree of capital structure debt.

Danger to Enterprise: One of the primary elements affecting capital in the banking industry is bank risk since regulatory requirements link the amount of capital banks must keep to the amount of risk they accept. This is primarily because capital is thought of as a buffer against unforeseen losses and insolvency. There is an inverse relationship between company risk and capital structure, according to both the agency and bankruptcy cost theories. According to the bankruptcy cost hypothesis, the likelihood of a firm failing and the effect of bankruptcy costs on the financing alternatives available to the business both decrease with consistent profitability. In a similar vein, agency issues resulting from debt worsen when bankruptcy is more likely. According to this hypothesis, an organization's capital structure should see a decline in debt as business risk rises (Taggart 1985).

The rationale is that tax shields lower the interest deduction's effective marginal tax rate. In reference to Graham's (1999) results, taxes do, in general, have an impact on business financial choices, although they are often "not large." Debt in the budget may be replaced by alternative tax shields including investment deductions, depreciation, and research and development costs, as shown by DeAngelo and Masulis (1980). It is challenging to assess this substitution impact

empirically because it takes time to establish a reliable proxy for tax reduction that eliminates the effects of economic depreciation and costs (Titman and Wessels, 1988).

According to Dammon and Senbet, concurrent choices on investments and finance can have an impact on income (1988). They contend that, as long as investment is permitted to react effectively, improvements in permissible investment-related tax shielding brought about by changes to corporate tax policy are not invariably linked to a decrease in indebtedness at the level of individual firms.

2.3 Theoretical Framework

The theory of capital structure forms the basis for this study. The Modigliani-Miller (MM) theory, proposed by Modigliani and Miller in 2012, posits that a firm's capital structure has little impact on its value under certain ideal conditions. In their construct, the capital market operates perfectly with seamless internal and external fund substitution, absence of transaction costs, bankruptcy fees, taxes, and full information accessibility. According to this hypothesis, a company's value should not be influenced by its capital structure. Instead, valuation should be based on market value and Weighted Average Cost of Capital (WACC), which reflect the risks and returns associated with the company's operations rather than its financing methods. Miller further refined the theory, asserting that corporate decisions regarding capital structure, including both corporate and individual taxes, are inconsequential (Miller, 2012).

2.3.1 Theory of Capital Structure

According to Modigliani and Miller (MM), (2012), a firm's capital structure has minimal effect on its value if a few important criteria are met. Everyone believes that the capital market is ideal in the universe that Modigliani and Miller constructed, with perfect internal and external fund substitution, no transaction costs, no bankruptcy fees, no taxes, and free information available to both insiders and outsiders. According to the M-M hypothesis (2012), a company's valuation shouldn't be based on its capital structure. The idea went on to say that a business's valuation should be assessed equally across all capital structure levels using its market value and Weighted Average Cost of Capital (WACC), which should be determined by the risks and return associated

with the operations of the company rather than how those activities are financed. Miller released a revised version of the capital structure theory of irrelevance. According to him, corporate choices on capital structure that include both company and individual taxes are meaningless (Miller 2012).

The value of the company may start to be impacted by capital structure if these fundamental presumptions are broken. As a result, research has contributed to describing the effects and easing the optimal assumptions. The argument against this notion is that a perfect market is never possible in real-world circumstances. The static trade-off theory was developed as a result of attempts to loosen these assumptions, especially the ones about no taxes and no costs related to filing for bankruptcy (Miller 2012).

2.3.2 Agency Cost Theory of Capital Structure

The interaction between the firm's management, which acts as the principle's representative, and the shareholders, who comprise the principle, lies at the heart of this concept. This implies that the company may be seen as the hub of a vague system of agreements between resource owners. When one or more people—referred to as principals—hire one or more other people—referred to as agents—to provide a service and then grant the agent decision-making power, an agency relationship is formed (Gang, 2014). Agency theory was introduced by Berle and Means (2014), who contended that ownership and control become more distinct when a large firm continuously dilutes its ownership of shares. Professional management should now prioritize their interests above the interests of the shareholders.

Gang (2014) argued that a capital structure would be able to achieve the ideal debt level with the support of lower agency costs, which result from managers' competing interests with shareholders and loan holders. They recommend either increasing managers' ownership stake in the company to better align their interests with the owners' or encouraging managers to utilize debt as a means of curbing their propensity for extravagant spending. Dimitris and Psillaki (2015) talk about an agency dilemma with free-cash flow. They proposed that by reducing managers' access to "free" cash, raising the amount of debt in the capital structure or the managers' ownership share in the company may assist in resolving the free cash flow issue. Decision-making authority is thus diminished for managers of companies with a high debt load compared to managers of companies

with a high equity financing ratio. Because of this, debt may be used as a tool for control, and lenders and shareholders play a big part in corporate governance.

2.3.3 Pecking Order Theory of Capital Structure

One of the most important theories of corporate leverage is Donaldson's 1961 Pecking Order Theory of Capital Structure. It contradicts the notion that businesses may reduce their cost of capital by the use of a certain mix of debt and equity financing. It makes the case that actual company leverage levels often mirror the well-known business practice of using internal resources to finance new initiatives wherever possible and issuing debt in lieu of equity when outside funding is needed. The primary refutation of the trade-off theory is this. It indicates capital structure objectives instead of reflecting them. A stock offering is often seen as a costly last alternative, in accordance with the pecking order idea. According to Chaplinsky and Niehaus (2017), a firm has a predetermined list of preferred sources of financing that it employs when determining how to fund its long-term objectives. It says that before going to outside equity and loans, a company should employ its own capital, or profits. According to Huang and Song (2015), prosperous companies often take out less loans since they will have enough cash on hand to support their investment goals. He goes on to argue that in the event that a business runs out of money, it should go outside the organization for financing, ideally via corporate bonds or bank loans. The last and least desirable source of funding, after corporate bonds, bank loans, and internal borrowing have all been exhausted, is the issuance of new shares.

According to the idea of least effort or least resistance, businesses prioritize their funding sources (going from internal finance to equity) and prefer to use equity as a last resort for financing (Chaplinsky and Niehaus, 2018). Pecking Order theory aims to capture the costs of asymmetric information. Consequently, internal funds are used first, followed by the issuance of debt when required, then equity when issuing debt is no longer required. On the other hand, Pecking Order Theory highlights how asymmetric information influences how new instruments are mispriced and argues that there is no objectively defined optimal debt ratio (Myers & Majluf; 2011). They claim that investors often think management understands the company's price-sensitive data at a deeper level. Because investors see riskier assets as more expensive, managers choose to issue them. The undervaluation of freshly issued shares is a result of investor perception. A large undervaluation often results in financial losses for the current investors. In order to lessen the

issue of information asymmetry, firms often utilize retained profits as their primary source of funding, with debt and outside equity financing coming in last (Chaplinsky and Niehaus, 2017).

According to Damodaran (2013), the issuance of excess shares by management often acts as a warning to investors on the high value of the firm. Investors, however, could respond adversely to news and would be less inclined to finance further shares in the absence of price decreases since they are aware of this knowledge asymmetry. There might be pressure on managers to pass on profitable NPV ventures or take on excessive debt, which could jeopardize the profitability of the business. The following arguments flow from these distinctions. Internal retained profits take precedence over external equity. Second, the sale might result in marketable securities, cash, or real estate. Finally, since debt is less expensive and riskier than equity, it is preferred (Myers, 2014).

2.3.4 The Free Cash Flow Theory of Capital Structure

The free cash flow problem was introduced by Jensen (2016) and is predicated on the analysis of conflicts between shareholders and management as well as the fundamental agency theory. Asymmetric and incomplete information is related to the agency conundrum; managers represent the interests of the shareholders, but this connection is complicated by conflicting interests. It asserts that management often acts in a way that puts advancing its own interests ahead of the interests of the shareholders. The choices made regarding capital structure and dividend policy may have a significant impact on how organizations operate (Meyers, 2014).

Agency charges are divided into two categories: agency costs of debt and agency costs of equity. The fact that managers cannot fully profit from an activity they carry out while also bearing the related costs and obligations gives rise to the agency costs of equity (Damodaran, 2019).

As a consequence, they will be more driven to get benefits and use the company's assets for personal advantage rather than managing the business in the best interests of all stakeholders (Pike & Neale 2014). Dividend distributions reduce the amount of free cash flow that is under management's control and hence reduce the likelihood that that cash flow would be squandered on projects having a negative net present value. Free cash flow is the cash flow that remains after funding all projects with a positive net present value. However, regardless of their NPV, managers are more willing to support activities aimed at growing their businesses. According to Meyers

(2014), growth provides managers additional power since it provides them with more resources to manage. Furthermore, growth increases managers' benefits since pay is often correlated with growth. Businesses with substantial free cash flows often have this problem more visible. The issue is how to enable managers to make efficient use of this cash flow (Fama and French, 2013). The influence of agency costs on capital structure would thus become more significant for such a corporation, as adding debt to the capital structure will substitute dividend distributions while lessening the agency problem by reducing the resources under managers' control. Debt may be a more effective way to reduce agency expenditures than dividend distributions, claim Inanga and Ajayi (2014). Pledges on dividends and cash payments to shareholders are subject to modification at any time. However, management must set aside money for principal and interest when issuing debt; otherwise, default costs would increase, and the organization's viability would be in jeopardy (Meyers, 2014). Issuing additional debt to finance share repurchases is a smart way to encourage management to make better use of the free cash flow. However, increased leverage will affect the value of the firm and increase the cost of financial difficulties as a consequence (Jensen, 2016).

Another possible cause of problems is the second category of agency expenditures, sometimes known as the agency costs of debt. The primary focus of agency costs of debt is the relationship between bondholders, shareholders, and the manager's methods of pursuing personal interests (Huang and Song, 2015). As the firm's capital structure gets increasingly leveraged, bondholders carry the default risk, with management and shareholders ultimately making the investment decisions. Difficulties occur when management starts acting in the shareholders' or bondholders' best interests. However, because they are aware of such conflicting facts, bondholders may set certain restrictions on how they use their money to reduce the likelihood of a financial default. Rajan and Zingales (2018). According to Jensen (2016), the "control hypothesis" states that a company's ability to influence management may be achieved by including debt in its capital structure. However, it isn't always applicable to all types of companies. It is becoming more and more important in large, well-established businesses with significant free cash flows but limited possibility of growth or investments with positive net present value. For these sorts of businesses, agency costs might have dire repercussions. Jensen (2016) said.

2.3.5 The Static Trade-off Theory of Capital Structure

According to Chaplinsky and Niehaus (2018), the static trade-off theory places a high emphasis on taxes and contends that the total amount of debt is determined by the trade-off between tax benefits and default risks. There are several benefits to the static trade-off idea. It offers a strong argument of the advantages of capital structure debt. The general consensus—that too little leverage may lower taxes while too much can lead to financial ruin—is understood and shared by the majority of businesspeople. According to the trade-off theory, there exists an ideal capital structure with equal benefits and costs related to debt. When the marginal benefit of an extra unit of debt is precisely offset by its marginal cost, the optimal capital structure is reached (Fama & French, 2013). Additionally, according to the hypothesis, younger companies that rely heavily on R&D and have less physical assets would borrow less than more established businesses that have larger free cash flows but fewer investment potential. It also backs studies on how the market responds to news of security-related transactions or issues. The practical importance of the trade-off theory is shown for each of these reasons (Myers, 2014).

Myers (2014) asserts that the straightforward static trade-off approach, however, is unable to account for unique or unforeseen situations. A corporation may be able to reduce its debt below the ideal level via asset sales and projected increases in operational revenues. On the other hand, an unanticipated decline in sales might cause a company to exceed its desired leverage ratio. We anticipate that businesses will issue debt or equity and choose the best capital structure when these things happen. To optimize organizational value, managers would aim to attain the ideal capital structure in both scenarios. Furthermore, the examination of the connection between leverage and profitability by Modigliani and Miller (2012) may provide the most compelling argument against the trade-off hypothesis. In fact, productive businesses often borrow less, whereas failing businesses typically borrow more. However, the trade-off hypothesis predicts the contrary, i.e., that highly successful businesses have more money to spend on tax evasion and debt issuance. Myers (2014) asserts that none of these defenses, however, negate the influence of the static trade-off theory on the optimal level of capital structure for a particular organization.

2.3.6 Resource-Based Theory of Capital Structure

The resource-based hypothesis states that a company's capacity to compete is dependent on the tangible and intangible resources it has, both of which are costly or challenging for rivals to get. To maintain the company's competitive advantage, these resources must be rare, precious, distinct,

and non-replaceable (Miller, 2012). One of resource-based theory's primary contributions is its capacity to explain enduring shifts in industrial conditions (Pike and Neale, 2021). It is arguable that there is a considerable amount of resource variability among the various shareholder classifications. Due to the possibility of financial, strategic, or domestic shareholders, these divisions apply to growing economic firms. It is expected that different owners with varied resource endowments would have different impacts on business performance due to this difference in organizational and resource capacity.

2.4 Empirical Review

To assist expanding and already-existing organizations in effectively organizing their financial systems, several national and international research projects have been carried out in this field. This section will discuss some of these studies and be organized both locally and worldwide to make it simpler to read. The following research was conducted locally, in Nigeria. Osaze (2015) used data from 87 of the 216 firms that were listed on the Nigeria Stock Exchange during five years (2007–2011) using the static trade-off, agency, and pecking order theories. He used panel multiple regression analysis, and the results show that the age, growth, and size of Nigerian listed companies, but not their profitability or tangibility, are highly correlated with their debt ratio.

Babalola (2014) used fourteen years' worth of audited financial information from thirty-one manufacturing enterprises (1999-2012) together with a static trade-off perspective. His research, which made use of triangulation analysis, showed that capital structure strikes a balance between the advantages and disadvantages of debt. It has also been disproved that huge organizations are more likely than middle-sized enterprises to continue functioning at a greater level of debt. Another research examined agency and static trade-offs across a ten-year period (2000-2009) using a sample of ten firms. He used regression analysis to test the hypothesis that corporate performance is a nonlinear function of capital structure. He concluded that trade-off theory is compatible with the capital structure of Nigeria's manufacturing sector.

Akinyomi (2013) utilized three manufacturing enterprises in the food and beverage categories that were randomly chosen during a five-year period (2007–2011) to examine the static trade-off and the pecking order theory from a theoretical standpoint. Using the correlation analysis method, he discovered that while long-term debt to capital is significantly and relatively related to return

on equity and return on asset, the other variables—debt to capital, debt to common equity, short-term debt to total debt, and the age of the company—are all significantly and positively related to these outcomes. He also examined the notion that capital structure and financial performance are significantly correlated using return on equity and return on asset.

Nwankwo (2014) used the static trade-off, pecking order, and agency theory perspectives to investigate ten companies that were listed on the Nigerian Stock Exchange during a five-year period (2006–2010).

In order to investigate agency cost theory, Bassey et al. (2020) employed a sample of 60 unquoted agro-based enterprises in Nigeria during a six-year period (2005–2010). They discovered that the only factors that significantly affected the long- and short-term debt ratios for the firms they were looking at were growth and the owners' educational level, using both descriptive statistics and Ordinary Least Square regression. Apart from risk, size, and profitability, the export status, age, gender, and asset structure of the businesses were all significant factors.

Simon-Oke and Afolabi (2014) used the static trade-off and agency cost theory in their nine-year (1999-2007) study of five listed businesses. Using a panel data regression model, they found that there was a positive correlation between a company's success and its debt-to-equity ratio and equity financing. There is a negative correlation between company performance and debt financing due to the high cost of borrowing in the nation.

Based on factors such as agency costs, free cash flow, relevance, pecking order, and trade-off theory, 90 businesses were chosen for main and secondary data, respectively, during a five-year period (2005-2009) in Semiu and Collins' (2015) study, which used a sample size of 150 respondents. They claimed that there is a positively significant association between a firm's capital structure decision and its market value in Nigeria using descriptive statistics and Chi-square analysis.

The following global projects were finished: Ong and Teh (2015) conducted a four-year (2005–2008) study on the operational effectiveness and financial structure of Malaysian construction enterprises. The independent variables (capital structure) were substituted by long-term debt to capital, debt to asset, debt to equity market value, debt to common equity, and long-term debt to common equity. As stand-ins for the company's performance, returns on capital, return on equity, earnings per share, operating margin, and net margin were used. The outcome suggests a connection between capital structure and the performance of businesses.

Zeitun and Tian (2020) looked at 167 Jordanian companies' 1989–2003 financial records and overall company performance. They discovered a strong inverse link between capital structure and business success. Performance was evaluated using a wide range of factors, such as profitability, growth, return on equity, and tangibility. Several terms were used to characterize capital structure: leverage, size, growth, and tangibility.

Gang (2014) investigated the capital structure and financial results of a few chosen Colombo Stock Exchange firms in Sri Lanka between 2005 and 2009. Debt served as a stand-in for capital structure, while returns on assets, gross profit, net profit, and return on investment / capital employed served as performance proxies. The findings demonstrated a negative correlation between capital structure and financial performance.

Khalaf (2013) used a sample of 45 industrial businesses listed on the Amman Stock Exchange to conduct five-year research, spanning from 2005 to 2009. The capital structure parameters Total Debt to Equity (TDE), Long-Term Debt to Total Assets (LTDTA), and Short-Term Debt to Total Assets (STDTA), as well as performance metrics such Return on Asset (ROA) and Profit Margin (PM), were analyzed using multiple regression analysis. The findings show that although there is a positive link between ROA and PM, there is a negative and negligible correlation between STDTA and LTDTA, TDE, and ROA. LTDTA is important while utilizing PM; on the other hand, STDTA is important when employing ROA. According to statistical research, a company's financial structure has little effect on how well it performs. It advises managers of manufacturing firms to exercise prudence when determining how much debt to include in their capital structure since it might have a detrimental impact on their performance.

Abdul (2022) used pooled ordinary least square regression to analyze the performance of 36 engineering sector businesses listed on the Pakistani Karachi Stock Exchange (KSE) between 2003 and 2009. Financial leverage, as expressed by short-term debt to total assets (STDTA) and total debt to total assets (TDTA), was shown to be strongly adversely connected with the company's performance as measured by Return on Assets (ROA), Gross Profit Margin (GM), and Tobin's Q. Financial debt and return on equity (ROE), which gauges a company's performance, have a weak, negative association. There is a large negative correlation with Tobin's Q, however there is no significant correlation between asset size and the company's success as shown by ROA and GM. The majority of financing for engineering firms in Pakistan comes from short-term loans;

nevertheless, these loans include stringent requirements that have an impact on the business's success.

Nevertheless, we found that most of these studies focus on certain sectors. For example, the building business in Malaysia, the manufacturing sector in Nigeria, the insurance industry in Nigeria, agro-based enterprises in Nigeria, and manufacturing companies in Nigeria, These subjects were the subject of studies by Babalola (2019), Akinyomi (2018), Abdul (2022), and others. However, most of the research is conducted during the same evaluation year period, which is 2000–2011, except for Zeitun and Tian (2013), who looked at data from 1989 to 2003, fifteen (15) years earlier. Except for Ogebe, Ogebe, and Alewi (2014), the majority of research did not examine the businesses' leverage status. In conclusion, Nigeria would not be able to properly use the international study's results despite their great significance because of the political and economic divide among the participating countries.

However, some studies—including Kim and Sorensen (2013), Titman and Wessels (2020), and Kester (2015)—indicate a contrary correlation. Moreover, statistically speaking, the findings are often not particularly significant. In this research, as in other comparable studies, the natural logarithm of revenue is used to assess the size of a corporation. Using the natural logarithm of a company's total assets is an alternate technique for determining its size.

Therefore, equivalent findings should be obtained when the natural logarithm of total assets is used as a proxy variable for a company's size. According to some research, there is a significant association between the natural logarithm of sales and total assets (0.68 in 2000 and 0.70 in 2001).

2.5 Gap in Literature

Over the years, capital structure analysis has been a focal point of research for numerous scholars. The decision regarding the debt-to-equity ratio is a critical and challenging one for every member of a company's management team. Akinyomi (2018) examined various factors over fourteen years, including debt to equity, debt to capital, and short-term debt to total debt. Similarly, Osaze (2015) explored the firm's debt ratio over five years, incorporating considerations such as age, growth, and business size characteristics. This study builds upon existing research by extending the investigation from 2000 to 2022 and incorporating additional factors such as bonds, preference

shares, ordinary shares, debentures, and income after tax, thereby bridging existing gaps in the literature.

2.6 Summary

The conceptual problems Nigerian deposit money banks face with their capital structure platform were covered in this chapter, along with how such problems impact their operational and financial results. Most businesses, like Deposit Money Banks in this instance, rely on the capital market to raise money from both public and private entities so they may establish their institution and eventually turn a profit from their business endeavors. This profit serves as a gauge for the quality of work these businesses have done to gain the trust and confidence of stakeholders and investors. As you can see, four concepts were examined to guide the initial goals of this research. The cash that the companies raise makes up the capital structure. To provide light on the expected outcomes of the variables used to meet the study's goals, the chapter also reviewed the empirical research of earlier writers.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Asika (2017) defines research methodology as the collection of organized rules and processes that serve as the foundation for a study and are used to verify claims about the state of knowledge and conclusions. This chapter covers the research data analysis approach or procedures.

The researcher used the following techniques:

3.1.1 Research Questions

1. What is the effect of Bonds on Profit after Tax of Deposit Money Banks in Nigeria?

2. To what measures do Preference Shares have on the Profit After Tax of Deposit Money Banks in Nigeria?

3. How does Ordinary Share affect Profit after Tax of Deposit Money Banks in Nigeria?

3.2 Research Method

The study adopts a quantitative research method using the ordinary least square statistical method and it is based on quantitative data analysis. The study also carries out descriptive data analysis to provide vital information about the data in terms of the means, medians, minimum, maximum, and Kurtosis.

3.3 Research design

The description of the steps and techniques used to gather the data required for a project is known as research design. A more accurate term for it would be model evidence that backs up the researcher's findings on the relationships between the variables they are examining (Omogefe, 2014). Examining and assessing the connection between capital structure and deposit money bank performance in Nigeria is the aim of this study. This led to an ex-post factor technique for this

study. The quasi-experimental strategy is one of the greatest study approaches since it enables the researcher to watch sample participants' behavior without attempting to influence or modify them (Yomere & Agbonifoh, 2012).

3.4 Population and Sample Size

According to Kothari (2004), a population is defined in contemporary science as a sizable number of occupants, both living and non-living, that are valuable in and of themselves on the socioeconomic scale. Nigeria has 35 DMBs as of the end of the fourth quarter of 2022. These were twenty-six (26) Commercial Banks (including two Non-Interest Banking Windows), six (6) Merchant Banks, and three (3) Non-Interest Banks (NIBs). Conversely, a sample is a selected individual from a target population whose characteristics identify the sample and the population it represents. The target demography for this research consists of all financial institutions in Nigeria. All the banks were used through a CBN bulletin data that covers all the deposit money banks in Nigeria. Furthermore, the sample size for this research includes all Nigerian deposit money institutions situated in Lagos State, Nigeria which are Zenith Bank, Guaranty Trust Bank, Fidelity Bank, Access Bank, Eco Bank, United Bank for Africa, Polaris Bank, Stanbic IBTC Bank, First City Monument Bank, Union Bank of Nigeria, Citi Bank, Heritage Bank, Keystone Bank, Stanbic IBTC, Standard Chartered Bank, Sterling Bank, Unity Bank, and Wema Bank.

3.5 Data Sources

The primary or secondary source is used literally in the data-collecting method (Olannye, 2016). The secondary approach was considered for this investigation, which employed secondary data as its source materials.

Between 2000 and 2022, secondary data on bonds, preference shares, ordinary shares, and profit after tax were sourced from Financial Reports and the Annual Statistical Bulletin. The dependent variables, which were taken from the CBN Statistical Bulletin (2000-2022), included all Deposit Money Banks in Nigeria; nevertheless, the dependent variable Profit after Tax included all Deposit Money Banks in Nigeria.

3.6 Sampling Criteria

To ensure that significant players in the banking industry are appropriately represented, the study should focus on the biggest banks in Nigeria. This might be assessed by looking at factors including the asset's size, market share, and overall effect on the financial sector.

Since the research and the study, itself span this period, the years 2000-2022 must be included in the sample. Verify that the selected institutions provide reliable and publicly available financial data for the period to assure temporal consistency.

3.7 Confidentiality

A fundamental tenet of both academic and professional contexts, confidentiality guarantees the privacy and preservation of sensitive data. In the context of research, this refers to protecting study participants' identities and replies as well as any private or proprietary data that is gathered throughout the inquiry. It is the responsibility of researchers and experts to protect study participants' privacy whether conducting surveys, studies, or any other kind of data collection. As part of this pledge, no private information will be misused, revealed, or accessed without authorization. Respecting confidentiality guidelines protects participants' right to privacy, promotes direct and honest engagement, and supports ethical considerations as well as the integrity of the research process.

3.8 Model Specification

The following variables will be included in the model based on the Research Methodology:

Modeling,

$$PAT = ORS + DBT + PRFS + BND \qquad Equation\ (1)$$

Rewriting Equation (1) in econometric form and taking the logarithms gives Equation (2) below:

$$PAT = \beta_0 + \beta_1\, lnORS + \beta_2 lnDBT + \beta_3\, lnPRFS + \beta_4\, lnBND + \varepsilon_1 \qquad Equation\ (2)$$

Where:

$$\beta_0 = Constant\ Intercept;\ \beta_1, \beta_2, \beta_3, \beta_4 = Coefficients;$$

$$PAT = Profit\ After\ Tax;\ ORS = Ordinary\ Shares;\ DBT = Debentures;$$

$$PRFS = Preference\ Shares;\ BND = Bonds;\ \varepsilon_1 = \mu = Error\ Term;$$

$$A\ priori\ expectation: \beta_1, \beta_2 < 0;\ \beta_3, \beta_4 > 0$$

The dependent variables are:

$lnORS = logarithm\ of\ Ordinary\ Shares$

$lnBND = logarithm\ of\ Bonds$

$lnPRFS = logarithm\ of\ Preference\ Shares$

and

$lnDBT = logarithm\ of\ Debentures$

After tax, log of profit $lnBND$ is represented by β_0, constant intercept, coefficients (β_1–β_3), and error term (μ).

3.9 Data Gathering

The influence of capital structure on Nigeria's banking system is the subject of an informative study, but researchers should be cautious of any potential biases that might distort how the results are interpreted. A number of drawbacks, including sample bias, are stated since the selected time period (2000 - 2022) would not accurately reflect the breadth of regulatory frameworks, industry dynamics, and economic situations. Because of the temporal uniqueness of the data, conclusions that underrepresent more substantial developments in the Nigerian banking system may result from the results' limited generalizability. It also draws attention to the possibility that other significant variables may be disregarded in favor of concentrating the research's emphasis on certain financial variables. It is accepted that the variable selection method has bias. It is made clear how crucial it is to confirm the consistency and integrity of historical financial data from various organizations and historical eras by bringing up various data availability and quality problems. By using correlation coefficients to prove causality and P-values to assess significance in hypothesis testing,

the research reveals possible biases. To get more consistent outcomes, a variety of strategies and thorough study are thus needed.

Minimize these biases by using sensitivity analysis to increase the results' stability and generalizability or by examining other research periods. By evaluating additional variables, selection bias is minimized and a deeper comprehension of the factors impacting Profit After Tax (PAT) is assured. To resolve issues with data quality, past financial data must be verified for correctness and consistency. To improve the validity and reliability of the research, it is advised to make a clear distinction between correlation and causation, use extra strategies such as experimental designs, and do robustness checks by modifying the alpha values in hypothesis testing. If we were to put these recommendations into practice, we may discover more about the complex link that exists between capital structure and deposit money bank performance in Nigeria.

3.10 Validity

Care must be used in assessing the impact of capital structure on Nigeria's banking industry, even in the presence of data biases. The sample bias arising from the chosen time range (2000–2022), which highlights the importance of considering temporal uniqueness, and the potential underrepresentation of noteworthy trends are among the highlighted downsides. The study warns against potential mistakes in variable selection and emphasizes the need for a deeper examination of relevant financial issues. To ensure that historical financial data is trustworthy and consistent across sectors and periods, data quality concerns must be fixed. The study's reliance on P-values for significance testing and correlation coefficients for causality inference introduces potential biases. This highlights the need for a range of methods and in-depth research to get more consistent findings.

To increase the validity of their study, researchers are recommended to incorporate earlier research periods, do sensitivity analysis, and broaden the range of variables they are examining. It is crucial to evaluate past financial data and discern between correlation and causation to lessen biases. Other methods, such as experimental designs and robustness checks that use various alpha values in hypothesis testing, are recommended to boost the study's credibility even more. We may be able to discover more about the intricate relationship between capital structure and deposit money bank performance in Nigeria by implementing these recommendations.

3.11 Data Analysis

In addition to being tested for Ordinary Least Square (OLS) and Diagnostic Test, the time series of the dependent variable, bank profitability expressed as Profit after Tax (PRF), and the independent variables, bond, preference share, ordinary share, and debenture, are diagnostically checked (Ojameruaye & Oaikhenan, 2013). An econometric technique is employed in this investigation. EViews 10 was used in running the analysis. The statistical methods listed below are used to determine the relevance of the variables and models:

(a) The student t-test is used to evaluate the distinct contribution and significance of each explanatory variable for each hypothesis that has been established.

(b) F-test: The F-test will be used to analyze each model at the 1% or 5% level of significance.

(c) The degree of association between the variables is shown by the multiple regression coefficient or R.

(d) R2: the coefficient of determination, which indicates the extent to which changes in the independent variables may account for the overall value of each dependent variable.

(e) To evaluate the model overall, use AR2, or the adjusted coefficient of multiple determinations.

(f) Watson Durbin: The degree of variable autocorrelation in each model will be assessed by the DW.

CHAPTER FOUR

Results Presentation

4.1 Preamble

This study provides the presentation of data analysis and results discussions.

Table 4.1: Descriptive Statistics

	PAT	BONDS	ORDINSHARE	PRFSHARES
Mean	13029136	224.7391	150.3174	201.1217
Median	9572329.	160.5000	56.20000	240.3000
Maximum	33227101	877.2000	612.0000	888.3000
Minimum	1339239.	0.000000	2.700000	0.000000
Std. Dev.	11098594	243.2566	173.9389	247.7509
Skewness	0.807555	1.169151	1.152415	1.712027
Kurtosis	2.225873	3.710857	3.376607	5.639266
Jarque-Bera	3.074192	5.724101	5.226820	17.91112
Probability	0.215005	0.057151	0.073284	0.000129
Sum	3.00E+08	5169.000	3457.300	4625.800
Sum Sq. Dev.	2.71E+15	1301823.	665604.1	1350371.
Observations	23	23	23	23

Source: Author's, Computation, 2024.

Each financial indicator's distribution's form, central tendency, and dispersion are all well-represented by these statistics.

Profit after tax, or PAT, is the highest average of the mean values, averaging about 13,029,136. The average values of these financial products are 224.7391 for bonds and 57.90435 for debt instruments. The average prices of preference and ordinary shares are represented by the mean values of 201.1217 and 150.3174 for ORDINSHARE and PRFSHARES, respectively.

A more central metric is shown by the median values, which stand for the midway point in each distribution. The median PAT, for example, is 9,572,329, meaning that half of the observations are below this cutoff. The center locations of the distributions for ORDINSHARE, PRFSHARES, , and BONDS are also shown by the median values of these variables.

The degree of dispersion between the data and the mean is shown by the standard deviation. Because of the large PAT standard deviation, the profit after taxes may vary significantly. Furthermore, the distributions of BONDS, PRFSHARES, and ORDINSHARE vary.

The distributions' asymmetry and shape are measured by skewness and kurtosis. The distributions of PAT, BONDS, ORDINSHARE, and PRFSHARES seem to be skewed towards higher values in terms of positive skewness, an indicator of a rightward skew. When the kurtosis value is more than three, the distribution is leptokurtic, meaning that the values are more severe and have larger tails.

Use the Jarque-Bera test to determine whether the data distribution is normal. The PRFSHARES test result's relatively big value and low P-value suggest that the distribution most likely deviates greatly from normal. Although to varying degrees, the other variables likewise exhibit deviations from normalcy.

To sum up, the financial variables' distribution form, variability, and central tendency are fully represented by descriptive statistics. They also provide valuable information that may be investigated and further understood.

Table 4.2: Regression Results for Objectives 1-4

Dependent Variable: PAT
Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BONDS	0.425356	0.186104	2.285586	0.0331
ORDINSHARE	0.244191	0.119661	2.040688	0.0562
PRFSHARES	0.132909	0.168973	0.786566	0.4418
C	5.995295	0.225662	26.56754	0.0000
R-squared	0.553004	Mean dependent var		6.929455
Adjusted R-squared	0.453672	S.D. dependent var		0.445876
S.E. of regression	0.329565	Akaike info criterion		0.807572
F-statistic	5.567204	Durbin-Watson stat		1.193763
Prob(F-statistic)	0.004258			

The regression results indicate the relationship between the dependent variable (Profit After Tax, or PAT) and the independent variables (BONDS, ORDINSHARE, PRFSHARES, and C, which is most likely a constant term). The primary elements are understood as follows:

Coefficients:

BONDS: Assuming all other variables remain constant, the correlation coefficient, which is found to be 0.425356, provides significant insight into the relationship between BONDS and PAT. The statistically stated correlation coefficient indicates that the two variables seem to be positively associated. Specifically, the data indicates that there is a proportional rise in PAT of around 0.425356 units for every unit increase in BONDS.

PAT and BONDS are anticipated to move in tandem due to their tight correlation. Stated differently, PAT generally increases in direct proportion to the growing tendency of the variable BONDS. However, it's crucial to emphasize that correlation does not imply causation. The association's strength and direction are evaluated by the correlation coefficient, not the cause-and-effect relationship between BONDS and PAT.

Applying the ceteris paribus assumption—which maintains that all other variables remain constant—is necessary to understand the special relationship between BONDS and PAT. In real-world situations, other external factors could influence both variables simultaneously, thus we can focus on the precise impact of BONDS on PAT while adjusting for other variables.

Observable statistical relationships may serve as the foundation for projections and tactical decisions made by analysts, researchers, and decision makers. But understanding the interplay between financial variables requires first knowing the correlation coefficient.

It is important to use care when inferring causation from the coefficient alone, even if it offers useful quantitative information on the strength and direction of the relationship. In financial modeling and regression analysis, further investigation and contextual factors are often required to get thorough and informed results.

ORDINSHARE: The coefficient, which is found to be 0.244191 in the context of regression analysis, is a crucial indicator of the relationship between ORDINSHARE and PAT. This coefficient indicates that, under the assumption that all other variables remain constant, an increase of one unit in ORDINSHARE is associated with an estimated rise of 0.244191 units in PAT.
Stated otherwise, the positive coefficient indicates a positive correlation between ORDINSHARE and PAT. The data indicates a similar pattern for PAT to expand by around 0.244191 units when the value of ORDINSHARE grows by one unit, all other things being equal.

It is crucial to stress the significance of the ceteris paribus assumption in this perspective. All other factors are taken for granted, with the major focus being on the relationship between ORDINSHARE and PAT, which permits a more focused analysis of their interaction.

When determining causation only based on the correlation coefficient, caution is advised. Even while the positive correlation indicates concurrent movement in the two variables, it is not indicative of a cause-and-effect relationship. More research is often necessary to fully understand how ORDINSHARE and PAT interact in a given financial scenario. This research may include looking at other contextual factors and potential confounding variables.

PRFSHARES: The coefficient for PRFSHARES is 0.132909. This coefficient represents the estimated change in the dependent variable (PAT) for a one-unit increase in the independent variable (PRFSHARES), assuming that all other variables are held constant.

However, the significance of the coefficient and the p-value are often assessed together. In this case, the coefficient's p-value is 0.4418. The p-value is an integral component of the hypothesis testing procedure since it allows one to evaluate the statistical significance of the computed coefficient.

As in the instance of 0.4418, a high p-value indicates a low chance of statistical significance for the observed relationship between PRFSHARES and PAT. Stated otherwise, there exists a possibility that the given coefficient just represents random fluctuation and not a true correlation, and that the linear relationship between PRFSHARES and PAT is not statistically significant.

Researchers often specify a significant threshold, typically denoted by the letter α (alpha) and fixed at 0.05. If the p-value is greater than α, there is not enough evidence to reject the null hypothesis. It's conceivable that the observed relationship in this case is not statistically significant since the p-value is higher than the widely accepted significance level of 0.05.

Practically speaking, this means that there is little chance of change in the coefficient-based connection between PRFSHARES and PAT. When interpreting such data, one should carefully consider possible reasons for the lack of statistical significance, such as small sample sizes, considerable variability, or the possibility that the underlying link is really very close to zero.

Constant, abbreviated as C: The projected intercept when all independent variables are zero is the coefficient, which is 5.995295.

Relevance of the Data At 0.0031 and 0.0331, respectively, the p-values for and BONDS are below the conventional significance threshold of 0.05. This implies that their PAT's prediction ability has statistical relevance.

With a p-value of 0.0562, ORDINSHARE is marginally significant—just above 0.05.

Given its higher p-value of 0.4418, PRFSHARES may not be a statistically significant predictor of PAT.

Fit of the Model: The model accounts for around 55.3% of the variation in PAT, with an R-squared of 0.553004.

The modified R-squared, which is calculated to be 0.453672, takes the number of predictors into consideration.

A low p-value (0.004258) on the F-statistic, which assesses the model's overall significance, indicates that at least one of the model's variables significantly predicts PAT.

Additional Details:

The average difference between the predicted and actual values of PAT is the regression's standard error, or S.E. Right now, it stands at 0.329565.

Autocorrelation problems may occur given the Durbin-Watson statistic of 1.193763, which is almost 2.

In summary, BONDS seem to be strong predictors of PAT, but ORDINSHARE is not particularly significant. It's possible that PRFSHARES will not reach a statistically significant level. One possible outcome of the whole model is a statistically significant PAT prediction. The context and possible problems like autocorrelation and multicollinearity must be considered.

Table 4.4: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.354990	Prob. F(4,18)	0.2885
Obs*R-squared	5.322772	Prob. Chi-Square(4)	0.2558
Scaled explained SS	2.934828	Prob. Chi-Square(4)	0.5688

Source: Author's computation, 2024.

The Obs*R-squared is 5.322772, and the corresponding p-value (Prob. Chi-Square (4)) is 0.2558. This part of the test assesses the relationship between the squared residuals and the independent variables. Again, the p-value is above 0.05, indicating a lack of strong evidence against the null hypothesis of homoskedasticity.

The Scaled explained SS is 2.934828, and the associated p-value (Prob. Chi-Square (4)) is 0.5688. Similar to the previous results, this part of the test examines the relationship between the squared residuals and the independent variables. With a p-value greater than 0.05, it supports the notion that there is no significant evidence of heteroskedasticity.

Table 4.5: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.258625	Prob. F(2,16)	0.3107
Obs*R-squared	3.126639	Prob. Chi-Square(2)	0.2094

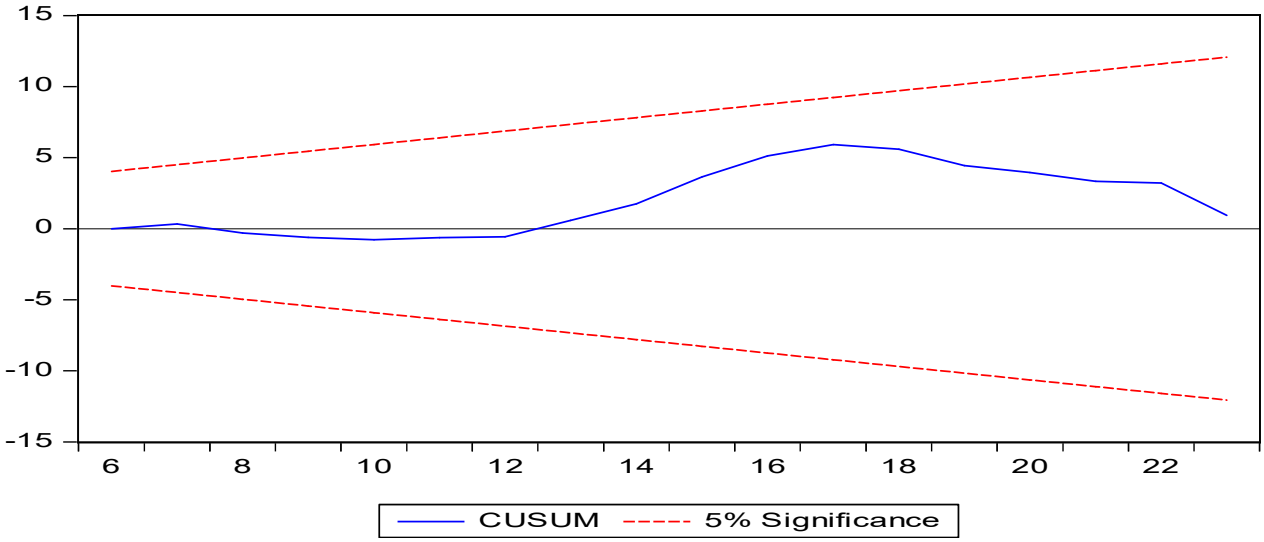
Source: Author's computation, 2024.

The Breusch-Godfrey Serial Correlation LM Test was conducted to examine the presence of serial correlation in the residuals of the regression model. The F-statistic, a measure of the test's strength, yielded a value of 1.258625, and its associated p-value (Prob. F(2,16)) was found to be 0.3107. Simultaneously, the Obs*R-squared value was 3.126639, with a corresponding p-value for the Chi-Square test (Prob. Chi-Square(2)) of 0.2094.

The null hypothesis posits no serial correlation in the residuals, indicating that errors are not systematically correlated across observations. The obtained F-statistic and associated p-values suggest that there is insufficient evidence to reject the null hypothesis. Specifically, the p-values, 0.3107 for the F-statistic and 0.2094 for the Chi-Square test, exceed the common significance level of 0.05. Therefore, the results indicate that the residuals do not exhibit significant autocorrelation, implying that the errors in the model are not systematically correlated across observations.

This outcome is favorable, as the absence of significant serial correlation in residuals enhances the reliability and efficiency of regression coefficient estimates. In conclusion, based on the Breusch-Godfrey Serial Correlation LM Test, the analysis suggests that the regression model does not suffer from notable autocorrelation issues in its residuals.

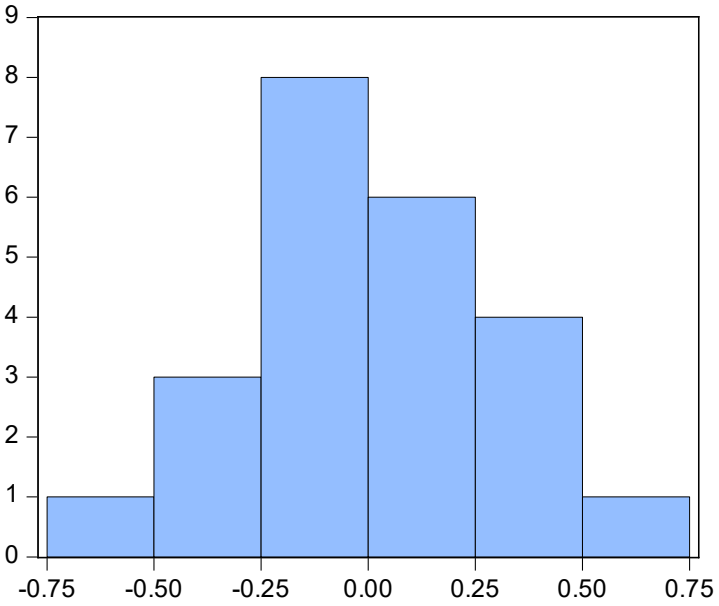
Figure 4.1: Recursive Estimates



A recursive test within the 5% significance level implies that the test's outcome falls within the critical region, leading to the rejection of the null hypothesis. In statistical hypothesis testing, the 5% significance level, commonly denoted as α (alpha), represents a threshold beyond which the null hypothesis is rejected. When a recursive test result lies within this range, it indicates that the observed data or parameters exhibit a significant departure from what would be expected under the null hypothesis.

In practical terms, this outcome suggests that the observed data or changes in the parameters at various stages of the recursive test are statistically meaningful and unlikely to occur by random chance alone. The significance level is a predetermined threshold that helps researchers make decisions about the validity of their findings. Therefore, a recursive test falling within the 5% significance level provides strong evidence to reject the null hypothesis, highlighting the presence of a noteworthy pattern or relationship in the data under investigation. Researchers typically interpret such results as indicating a meaningful and statistically significant impact or effect within the context of the study.

Figure 4.2: Normality Test



Source: Author's computation, 2024.

The Jarque-Bera test is a statistical test that assesses whether the data distribution of a sample is approximately normally distributed. In your case, the Jarque-Bera test resulted in a probability value of 0.939181.

In interpreting this result, the null hypothesis of the Jarque-Bera test is that the data follows a normal distribution. A higher probability value, such as 0.939181, suggests that there is insufficient evidence to reject the null hypothesis. In other words, the data does not deviate significantly from a normal distribution.

It's important to note that when the probability value is greater than the common significance level (often set at 0.05), you fail to reject the null hypothesis. Therefore, with a probability of 0.939181, you do not have significant evidence to suggest that the data deviates from a normal distribution based on the Jarque-Bera test. This is a favorable outcome, indicating that the data may reasonably approximate a normal distribution.

4.2 Main Findings

4.2.1 Main Findings for Research Questions 1

What is the effect of Bonds on Profit after Tax of Deposit Money Banks in Nigeria?

Assuming all other variables remain constant, the correlation coefficient, which is found to be 0.425356, provides significant insight into the relationship between BONDS and PAT. The statistically stated correlation coefficient indicates that the two variables seem to be positively associated. Specifically, the data indicates that there is a proportional rise in PAT of around 0.425356 units for every unit increase in BONDS.

PAT and BONDS are anticipated to move in tandem due to their tight correlation. Stated differently, PAT generally increases in direct proportion to the growing tendency of the variable BONDS. However, it's crucial to emphasize that correlation does not imply causation. The association's strength and direction are evaluated by the correlation coefficient, not the cause-and-effect relationship between BONDS and PAT.

Applying the ceteris paribus assumption—which maintains that all other variables remain constant—is necessary to understand the special relationship between BONDS and PAT. In real-world situations, other external factors could influence both variables simultaneously, thus we can focus on the precise impact of BONDS on PAT while adjusting for other variables.

Observable statistical relationships may serve as the foundation for projections and tactical decisions made by analysts, researchers, and decision makers. But understanding the interplay between financial variables requires first knowing the correlation coefficient.

4.2.2 Main Findings for Research Questions 2

Does Preference Shares have any impact on the Profit After Tax of Deposit Money Banks in Nigeria?

The coefficient for PRFSHARES is 0.132909. This coefficient represents the estimated change in the dependent variable (PAT) for a one-unit increase in the independent variable (PRFSHARES), assuming that all other variables are held constant.

However, the significance of the coefficient and the p-value are often assessed together. In this case, the coefficient's p-value is 0.4418. The p-value is an integral component of the hypothesis testing procedure since it allows one to evaluate the statistical significance of the computed coefficient.

As in the instance of 0.4418, a high p-value indicates a low chance of statistical significance for the observed relationship between PRFSHARES and PAT. Stated otherwise, there exists a possibility that the given coefficient just represents random fluctuation and not a true correlation, and that the linear relationship between PRFSHARES and PAT is not statistically significant.

Researchers often specify a significant threshold, typically denoted by the letter α (alpha) and fixed at 0.05. If the p-value is greater than α, there is not enough evidence to reject the null hypothesis. It's conceivable that the observed relationship in this case is not statistically significant since the p-value is higher than the widely accepted significance level of 0.05.

Practically speaking, this means that there is little chance of change in the coefficient-based connection between PRFSHARES and PAT. When interpreting such data, one should carefully consider possible reasons for the lack of statistical significance, such as small sample sizes, considerable variability, or the possibility that the underlying link is really very close to zero.

4.2.3 Main Findings for Research Questions 3

How does Ordinary Share affect Profit after Tax of Deposit Money Banks in Nigeria?

The coefficient, which is found to be 0.244191 in the context of regression analysis, is a crucial indicator of the relationship between ORDINSHARE and PAT. This coefficient indicates that, under the assumption that all other variables remain constant, an increase of one unit in ORDINSHARE is associated with an estimated rise of 0.244191 units in PAT.

Stated otherwise, the positive coefficient indicates a positive correlation between ORDINSHARE and PAT. The data indicates a similar pattern for PAT to expand by around 0.244191 units when the value of ORDINSHARE grows by one unit, all other things being equal.

It is crucial to stress the significance of the ceteris paribus assumption in this perspective. All other factors are taken for granted, with the major focus being on the relationship between ORDINSHARE and PAT, which permits a more focused analysis of their interaction.

When determining causation only based on the correlation coefficient, caution is advised. Even while the positive correlation indicates concurrent movement in the two variables, it is not indicative of a cause-and-effect relationship. More research is often necessary to fully understand how ORDINSHARE and PAT interact in a given financial scenario. This research may include looking at other contextual factors and potential confounding variables.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides the summary of results, main findings for research questions, conclusions, implications and limitations, and suggestions for future studies. The study delves into the critical nexus between a bank's capital structure decisions and its overall performance, emphasizing the significance of these choices in shaping stakeholders' expectations. While previous research has extensively explored the relationship between capital structure and firm value, particularly in non-banking contexts, limited attention has been paid to the intricacies within the banking sector. Capital structure decisions, driven by factors such as tax exemptions and default risks, are pivotal for banks as they navigate between debt and equity financing options. The theoretical underpinnings of capital structure, dating back to Modigliani and Miller's assertions of its irrelevance in frictionless markets, have fueled ongoing debates, especially concerning the optimal mix of debt and equity financing.

Given the lack of empirical evidence in the Nigerian context, this study aims to address the gap by investigating the impact of capital structure on the performance of deposit money banks in Nigeria. Through an analysis spanning the years 2000 to 2022, the study examines the influence of bonds, preference shares, and ordinary shares on key performance metrics such as Profit after Tax (PAT). By posing specific research questions and hypotheses, the study endeavors to unravel the complex interplay between capital structure decisions and bank performance within the dynamic Nigerian economic landscape. The research's significance extends beyond academia, with potential implications for bank management, investors, policymakers, and the general public, shedding light on the nuanced implications of capital structure choices in driving bank sustainability, investor confidence, and overall economic growth.

The literature review provides a comprehensive examination of the factors influencing the capital structures and performance of Nigerian banks, offering insights from conceptual, theoretical, and empirical perspectives. Beginning with an overview of the Nigerian banking sector's evolution, driven by regulatory reforms such as bank consolidation and the adoption of international financial reporting standards, the review highlights the sector's resilience and adaptability amidst changing economic landscapes. The integration of the banking system into global best practices, coupled with initiatives to enhance financial inclusion through non-interest banking and microfinance,

underscores the sector's commitment to fostering sustainable economic growth. However, challenges such as the cashless policy's effectiveness and the need for infrastructural improvements pose ongoing hurdles to the sector's development.

A key focus of the literature review is the concept of capital structure, which delineates the proportion of debt and equity financing utilized by firms to support their operations. Drawing on seminal works by Modigliani and Miller, the review explores the theoretical underpinnings of capital structure decisions, emphasizing the quest for an optimal balance between debt's tax advantages and equity's risk mitigation. Despite theoretical models suggesting the existence of an ideal capital structure, empirical evidence indicates the complexity of real-world financial dynamics, influenced by factors such as market conditions, firm-specific characteristics, and regulatory environments. Moreover, the review underscores the importance of capital structure decisions in shaping firm performance, with implications for profitability, risk management, and shareholder value maximization. Through an in-depth analysis of determinants and effects of capital structure theories, the literature review sets the stage for empirical investigation into the dynamics of Nigerian banks' capital structures and their impact on performance.

While chapter three provides the methodology of the study and sources of data, chapter four shows the results and the discussion of results. Chapter five provides the recommendations, conclusions and suggestions for future studies.

5.2 Summary

The study investigates the impact of capital structure on the Nigerian Banking Industry. While the scope of the data ranges from 2000 to 2022, the ordinary least square was employed for the analysis of the data. The study is structured to provide answers to the following set of objectives. To determine if Bonds have effect on Profit after Tax (PAT) of Deposit Money Banks in Nigeria; to establish if Preference Shares have impact on Profit after Tax (PAT) of Deposit Money Banks in Nigeria; to ascertain if Ordinary Shares have impact on Profit after Tax (PAT) of Deposit Money Banks in Nigeria.

5.3 Conclusion

In conclusion, the study examines the impact of capital structure on the Nigerian banking industry between 2000 and 2022 using Ordinary Least Square analysis. The key results for each research subject are outlined below:

According to the correlation value of 0.425356, there is a positive link between PAT and BONDS. Assuming no changes in other variables, a one-unit increase in BONDS is associated with a roughly 0.425356 unit increase in PAT. One must understand the ceteris paribus principle to understand this specific connection. Data suggests a connection between growing PAT and rising BONDS, but a correlation does not prove causality. The data shown here may be useful to analysts and decision makers.

Based on the high p-value of 0.4418, statistical significance is questionable despite the PRFSHARES coefficient of 0.132909. This suggests that the linear relationship between PRFSHARES and PAT lacks statistical validity. More research is necessary to completely understand the lack of significance, taking into consideration potential factors like sample size and variability.

The result of 0.244191 indicates a positive association between ORDINSHARE and PAT. Assuming that all other variables remain same, there exists a correlation between an anticipated rise in PAT of 0.244191 units and an increase in ORDINSHARE of one unit. Ceteris paribus is crucial to this investigation. Coordinated motion is indicated by correlation, but causation needs further research that considers environmental factors.

The coefficient of 0.244191 suggests a positive correlation between ORDINSHARE and PAT. Holding all other factors constant, this indicates that a projected increase of 0.244191 units in PAT is associated with a one-unit rise in ORDINSHARE. It's essential to maintain the ceteris paribus condition in this analysis. While correlation implies coordinated movement between the variables, establishing causation requires additional research that accounts for environmental factors and potential confounding variables.

5.4 Implications

Making Strategic Decisions: In the Nigerian banking industry, strategic decision-making is aided by the positive connections between PAT and capital structure elements. Analysts may utilize these findings to predict future developments and modify their plans to optimize profitability.

Use care while looking at the data: The need for caution is shown by PRFSHARES's lack of statistical significance. Variables that may affect significance levels include sample size and data variability, which researchers and practitioners must consider.

Trade that Adapts: Granger causality tests have shown the potential use of historical data for predictive modeling by illustrating the temporal relationships between variables. This influences risk management and forecasting methods.

5.5 Limitations and Suggestions for Future Research

Data Restrictions: The quality and accessibility of historical financial data for the Nigerian banking sector, which is accessible from 2000 to 2022, may influence the study's conclusions.

Sample Size: The size of the sample may influence the significance levels in statistical tests. Researchers must be aware that the dependability of their findings may be jeopardized by a small sample size.

External Factors: Even though the study is predicated on the idea that nothing else changes, it is feasible that outside developments in the economy, markets, or legal system may affect the apparent correlations between capital structure and profitability.

Longitudinal Studies: To capture changing patterns and developments in the Nigerian banking industry, future studies may examine longer periods.

The combination of quantitative methodologies with in-depth qualitative study may lead to a comprehensive knowledge of the contextual elements impacting the identified correlations.

Comparative Studies: Research conducted in a variety of sectors or geographical areas may provide insightful viewpoints on the applicability of conclusions and the influence of particular economic circumstances.

In conclusion, this research advances our knowledge of the complex connection between Nigerian deposit money bank performance and capital structure. The results serve as the basis for continuing conversations within the financial research community, strategic decision-making, and more studies.

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Appendix I

YEAR	Profit After Tax (PAT)	Bonds	Preference Shares	Ordinary Share
	Billion (₦)	Billion (₦)	Billion (₦)	Billion (₦)
2000	1,339,239	12.4	0	2.7
2001	1,507,295	0.2	0.1	6.5
2002	1,951,769	0	0	10.9
2003	2,734,853	2.8	0.5	24.6
2004	3,026,889	3	2.3	32
2005	3,621,821	4	10.9	31.8
2006	17,942,256	3.7	39.3	75.8
2007	7,566,448	79.8	0	177.4
2008	9,572,329	76.1	0	317.5
2009	8,233,358	343.5	0	612
2010	11,590,612	391.8	240.1	486
2011	13,135,799	146.4	246.7	355.8
2012	30,747,675	160.5	240.9	287.1
2013	29,237,390	304.4	240.3	274
2014	33,087,027	539.2	242	64.1
2015	31,585,005	723.5	294.4	22.2
2016	33,227,101	877.2	877.2	16.8
2017	18,943,351	77.3	256.2	266.2
2018	7,766,748	363.7	250.1	262
2019	9,674,323	396.9	250.4	56.2
2020	8,553,352	183.3	251	23.2
2021	11,880,633	162.6	295.1	17.2
2022	2,744,857	316.7	888.3	35.3

Appendix II - Log Data

LogPAT	logBONDS	LogPRFSHARES	LogORDINSHARE
6.126858	1.093422	1.69	0.431364
6.178198	-0.69897	-1	0.812913
6.290428	1.8	1.7	1.037426
6.436934	0.447158	-0.30103	1.390935
6.480996	0.477121	0.361728	1.50515
6.558927	0.60206	1.037426	1.502427
7.253877	0.568202	1.594393	1.879669
6.878892	1.902003	1.45	2.248954
6.981018	1.881385	1.67	2.501744
6.915577	2.535927	1.87	2.786751
7.064106	2.593064	2.380392	2.686636
7.118456	2.165541	2.392169	2.551206
7.487812	2.205475	2.381837	2.458033
7.465939	2.483445	2.380754	2.437751
7.519658	2.73175	2.383815	1.806858
7.499481	2.859439	2.468938	1.346353
7.521492	2.943099	2.943099	1.225309
7.277457	1.888179	2.408579	2.425208
6.890239	2.560743	2.398114	2.418301
6.985621	2.598681	2.398634	1.749736
6.932136	2.263162	2.399674	1.365488
7.07484	2.211121	2.469969	1.235528
6.43852	2.500648	2.94856	1.547775