TITLE PAGE

EFFECT OF CAPITAL STRUCTURE ON PROFITABILITY OF BANK OF INDUSTRY (BOI), KADUNA

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF BUSINESS ADMINISTRATION, COLLEGE OF BUSINESS AND MANAGEMENT STUDIES

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DECLARATION

I hereby declare that this project was written by me under the guidance and supervision of **Mal. Bello Usman** of the Department of Business Administration. The researcher has neither copied someone's work nor has someone else done it on my behalf. All references made to published literature have been duly acknowledged.

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APPROVAL

This is to certify that this project titled "**Effect of Capital Structure on Profitability of Bank of Industry (BOI), Kaduna**" written by **Samuel Monday, KPT/CBMS/19/46755**, has been read and approved as having met the requirement governing the preparation and presentation of project in Kaduna Polytechnic. It is hereby approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research project is dedicated to Almighty God.

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ABSTRACT

This study examined the effect of capital structure on profitability of Bank of Industry (BOI), Kaduna. Specifically, the study examined the effect of short term debts, long term debt, and equity financing on the profitability of Bank of Industry (BOI), Kaduna. A sample of 58 was drawn from population of 68 using Yamane formula. Three (3) research questions were raised to guide the study while a set of questionnaire was used to obtain data from the respondents. Simple mean score method was used to analyze the data obtained. Findings from the study revealed that short-term debt has significant effect on the profitability of Bank of Industry (BOI). The study further revealed that long term debt has significant effect on the profitability of Bank of Industry (BOI). More so, the study found that equity financing has significant effect on the profitability of Bank of Industry (BOI), Kaduna. The study recommends among others that the banks management should pay greater attention to the effectiveness of short term debts in order to enhance the profitability of Bank of Industry (BOI), and also place greater emphasis on long term debt as a tool for organizational profitability.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the major objectives of a firm is to maximize the wealth of owners or shareholders of the firm. The wealth of shareholders' in turn is defined as the current price of the firm's outstanding shares. In order to achieve this objective, firm's management should take rational financing decisions regarding optimal capital structure which in turn would minimize its cost of capital (Goyal, 2013). Capital structure refers to several alternatives that could be adopted by a firm to get the necessary funds for its investing activities in a way that is consistent with its priorities (Abbadi & Abu-Rub, 2012). Most of the effort of the financial decision making process is centered on the determination of the optimal capital structure; where the cost of capital is minimized and firms' value is maximized. Capital structure theory suggests that firms determine what is often referred to as a target debt ratio; which is based on various trade-off between the costs and benefits of debt versus equity (Bayeh, 2017). The theory of capital structure was first established by Modigliani and Miller in 1958. Following the seminal work of Modigliani and Miller, a vast theoretical literature developed, which led to the formulation of alternative theories, such as the static trade off theory, pecking order theory and agency cost theory (Bayeh, 2017).

The trade- off theory states that the optimal debt ratio is set by balancing the trade-off between the benefit and cost of debt. According to this theory, the optimal capital structure is achieved when the marginal present value of the tax shield on additional debt

is equal to the marginal present value of the financial distress cost on additional debt (Myers & Majluf, 2014). The pecking order theory emphasizes the information asymmetry between the firm insiders and the outside investors suggesting that firms use debt only when the internal financing is not available (Myers & Majluf, 2014). Besides, the agency cost theory predicts the capital structure choice based on the existence of agency cost. This theory investigates the relationship between the manager of the firm, and the outside equity and debt holders (Jensen & Meckling, 2016).

Commencing from Modigliani and Miller, the literature on capital structure has been expanded by many theoretical and empirical contributions. For non-financial firms the empirical literature has generally focused on particular variables that have been found to be consistently correlated with leverage such as: age, size, growth, profitability, market-to-book ratio, collateral value and dividend policy. On the other hand, the capital structure of banks is still a relatively under-explored area in the banking literature. Currently, there is no clear understanding on how banks choose their capital structure and what factors influence their corporate financing behavior (Amidu, 2017). Likewise, the relationship between capital structure and profitability is one that received considerable attention in finance literature. However, in the context of banking industry, the subject has received a limited research attention (Taani, 2013).

In Nigeria, there are a few studies in relation to determinants of capital structure and determinants of profitability distinctly studied by deferent researchers such as, Ashenafi (2015) a case study in Lagos Small and Medium Enterprises, Amanuel (2017) evidence from manufacturing share companies of Abuja, and Bayeh (2017) evidence from

Nigerian insurance company. In addition, Weldemikael (2012) studied on determinants of capital structure of commercial banks in Nigeria. Amdemikael (2012) also assessed factors affecting profitability of banks. But, no one was emphasized on the core business profitability of banks. Hence, as to the knowledge of the researcher, there were little studies related to this title "The Effect of Capital Structure on Profitability of Banks" with an emphasis on the profitability of core business operation and only considers the case of Bank of Industry (BOI), Kaduna. Therefore, given the unique features of banks' financial structure and the environment in which they operate, there are strong grounds for a separate study on the impact of capital structure on profitability of banks in Nigeria with due focus on the profitability of core business operations of commercial banks.

1.2 Statement of the Problem

Every investment decision taken by the manager affects the profitability of the banks. What percentage of the capital should be debt and what percentage should be equity so as to maximize profitability of the banks given that each source of finance has a cost benefit attached to it. The difficulties associated with designing on optimum capital structure policies to enhance profitability is the reason why this study sought to examine whether capital structure affect the bank's profitability, concentrating on Bank of Industry (BOI) as a case study.

Several studies have been conducted on capital structure and profitability in Nigeria. Such researches notably the work of Kajola and Onaolapo (2015), conducted their research on capital structure and firms profitability in Nigerian financial sector and the result shows that firm's capital structure surrogated by debt ratio has a negative impact on

firm's performance. Osuji and Odita (2012) equally examined the impact of capital structure on financial performance of Nigerian firms and the result also shows that capital structure has a negative impact on firm's financial performance.

According to Octavia and Brown (2018), the capital structure of banks are still a relatively under-explored area in the banking literature and the special nature of the deposit contract, the degree of leverage in banking and the regulatory constraints imposed on banks have meant that banks (and financial institutions in general) have been excluded in previous empirical studies on standard capital structure choice. However, understanding the determinants of capital structure and profitability as well as the impact of financing decision or capital structure on profitability is as important for banks as for non-banks firms. According to Amidu (2017) currently, there is no clear understanding on how banks choose their capital structure and what factors influence their corporate financing behavior. Likewise the relationship between capital structure and profitability is one that received considerable attention in the finance literature. However, in the context of banking industry, the subject has received a limited research attention (Taani, 2013). It is therefore based on this, that the study embarks on the effect of capital structure on profitability of Bank of Industry (BOI), Kaduna.

1.3 Objectives of the study

The main objective of this study is to examine the effect of capital structure on profitability of Bank of Industry (BOI), Kaduna. The specific objectives are to:

i. examine the effect of short term debts on the profitability of Bank of Industry (BOI), Kaduna.

ii. examine the effect of long term debt on the profitability of Bank of Industry (BOI), Kaduna

iii. examine the effect of equity financing on the profitability of Bank of Industry (BOI), Kaduna.

1.4 Research Questions

To guide the conduct of this study, the following research questions were raised.

i. To what extent does short term debts have an effect on the profitability of Bank of Industry (BOI), Kaduna?

ii. How does long term debt affect the profitability of Bank of Industry (BOI), Kaduna?

iii. To what extent does equity financing affect the profitability of Bank of Industry (BOI), Kaduna?

1.5 Significance of the Study

The significance of this study cannot be over emphasized. This is because it will assist various stakeholders to understand how capital structure affects profitability of financial sector of the Nigerian banking sector.

First and foremost, the study will be useful to managers who will use the findings of this research as a guide in financial decision making.

Also researchers willing to carry out research on similar topic, the information contained in this research will constitute useful data for them to use in meeting up their research requirement. It will equally be a reference reading material to students and lecturers.

This research will equally help managers in understanding which optimal capital structure to adopt to increase financial performance.

The study will be of great importance to investors as it will enable them to create a portfolio that yields maximum return on investment. Also it will help policy makers and regulatory agencies in the formulation and implementation of policies towards improving the industry's efficiency.

Finally, it will serve as a pre-requisite for the award of Higher National Diploma in Business Administration and Management, Kaduna Polytechnic.

1.6 Scope of the Study

The scope of this research will be restricted to the effect of capital structure on the profitability of bank with special reference to Bank of Industry (BOI). The study will cover the period of five years, from 2017 – 2021.

1.7 Limitations of the Study

In the process of conducting the research, the researcher faced the problem of not been able to lay hands on research materials needed for the review of literature.

The inability to collect all the questionnaires administered was another problem faced by the researcher.

Finally, the researcher encountered the problem of not been able to have enough fund to carry out the research extensively.

1.8 Definition of terms

The following are the definition of some key terms as used in the study

Capital Structure: Is the proportion of short and long term debt and is considered when analyzing capital structure.

Collateral: Is a borrower's pledge of a specific property to a lender, to secure repayment of loan.

Combined Leverage: This is the summation of finance and operating leverage.

Debt Security: Is a security issued by government or other corporate entities at a specific rate of interest and to be repaid on due date.

Debt: Amount of money borrowed by a person or firm to finance business operations.

Equity Capital: Is the risk capital owned by shareholders through the purchase of a common stock.

Equity Financing: Is the money generated by a firm through the issuance of shares.

Financial Risk: Is the risk to equity holders caused by increase in fixed income securities.

Financial Crises: A disruption of financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities.

Long-Term Debt: Long-term debt or liabilities are loans, bonds or other securities with maturities greater than one year. They often involve long-term commitment of interest payments.

Short-Term Debt: Short-term debt or liabilities are loans, bonds or other securities that have a maturity date within a year.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of Capital Structure

Capital structure otherwise known as financial structure has been defined by numerous knowledgeable individuals. According to Onaolapo and Kajola (2015), it is the means by which an organization is financed. It is the combination of equity and debt capital maintained by a company. Van Horne and Wachowicz (2015) defined capital structure as the mix (or proportion) of a firms" permanent long term financing represented by debt, preferred stock and common stock equity, he considered debt and equity financing as major components of capital structure.

Uremadu (2014) defined the capital structure of a company as the relationship that exist between the different classes of capital in the company. In his wok he further defined and identified the classes of capital to include both long term and short term sources of capital and equity. This view was also shared by Akinsulire (2012) where he defined the capital structure of the company to be how the company finances its operations. According to him, the means of finance are usually made up of three sources which include the ordinary share capital, the preference share and the debt capital.

Agoro and Ema (2012) defined capital structure as the percentage of capital (money) at work in a business by type. It is a mix of a company's long term debt, specific short term debt, common equity and preferred equity and it simply describes how a firm finances its overall operations and growth by using different sources of funds. Broadly speaking,

there are two forms of capital equity capital and debt capital. Each has its own benefits and drawbacks and a substantial part of wise corporate management is attempting to find the optimal capital structure in terms of risk/reward pay off for shareholders. A firm's capital structure is then the composition or structures of its total assets are total debt. For example, a firm that sells N40billion in equity and N60billion in debts is said to be 40% equity financed and 60% debt financed. The firms ratio of debt to total financing 60% is thus referred to as the firms leverage which can also be describe as it is gearing ratio or the proportion of the capital employed of the firm which comes from outside business.

According to Booth (2017), knowledge about capital structure has mostly been derived from data in developed economies that have many institutional similarities. Since different countries have different institutional arrangements mainly with respect to tax and bankruptcy codes existing market for corporate control, and the roles of banks and securities market, it might prove inadequate to infer what occurs in the developed economies or what determines their capital structure can be used to explain what is obtainable in the developing countries like Nigeria. In addition, there are differences in the social and cultural issues and in levels of economics development; thus, the need to determines of capital structure for firm developing economies. Adetifa (2015) posits that the critical stage of a company's financing is its capital structure which involves maintenance of various combinations of capital stock that could maximize shareholders' wealth.

The capital structure decision is significant as it affects the cost of the capital and market value of the firm. According to Kurfi (2012), under favorable economic conditions,

increase in debt capital that is referred as leverage also increase earning per-share to the equity holders. That is, even though leverage cannot change the total expected earnings of the firms, it can affect the residue earnings to the shareholders.

Nwude (2015) defines capital structure as the mixture of long term financing sources such as debt, preference share and equity interest (share capital, share premium, statutory resources, revenue resources redemption resources or retained earnings) which constitutes the permanent capital used to finance an organization. According to him, it is made up of the permanent capital of the firm. He also pointed out the difference between financial structure and capital structure. Financial structure is made up of both current liabilities and long-term liabilities, while capital structure is made up of only long-term liabilities. This relationship is expressed below:

Financial Structure = Capital Structure + Current Liabilities

Capital Structure = Financial Structure - Current Liabilities

To further elaborate on capital structure, it is important to explain the elements of the firm's capital structure:

i. **Debt Financing**: Debt financing is a kind of finance that becomes a commitment for the company to repay back interest and principal at the end of a particular period. These interests are tax deductible and the tax authorities make an allowance for these expenses. The inability of the company to repay this commitment and the interest accruable to this commitment would attract distress for the company and this would ultimately lead to bankruptcy.

ii. **Equity financing**: This entails the ability of the firms to raise its external finance from the public and at the same time issue out a part of the firms ownership right evidenced by share certificate. The equity holders are part owners of the company. At the end of the financial period, the firms rewards the equity holders with dividend from the profit made by the company (Efobi 2018).

2.1.2 The Concept of Profitability

Profitability means ability to make profit from all the business activities of an organization, company, firms or an enterprise (Akintoye, 2018). This shows how efficiently the management can make profit by using all the resources available in the market. According to Kane and Rice (2017), "profitability us the ability of a given investment to earn a return from it use". However, the term "profitability is not synonymous to the term" efficiency profitability is an index of efficiency, and is regarded as a measure of efficiency and management guide to greater efficiency. Though, profitability is an important yardstick for measuring the efficiency, the extent of profitability cannot be taken as a final proof of efficiency sometimes satisfactory profits can make inefficiency and conversely a proper degree of efficiency can be accompanied by an absence of profit. The net profit figure simply reveals a satisfactory balance between the values receive and value given. The change in operational efficiency is merely one of the factors on which profitability of an enterprise largely depends, moreover, there are many other factors besides efficiency, which affect the profitability.

Sometimes, the terms "profit" and profitability are used interchangeably. But in real sense, there is a difference between the two. Profit is an absolute term, whereas the

profitability is a relative concept. However, they are closely related and mutually interdependent, having distinct roles in business. Profit refers to the total income earned by the enterprise during the specified period of time, while profitability refers to the operating efficiency of the enterprise. It is the ability of the enterprises to make profit on sales. It is the ability of enterprise to get sufficient return on the capital and employees used in the business operation.

According to ICAN Pack (2009), profitability takes into account (i.e. consideration) both profits and the assets utilized in generating such profits. As Pandy (2012) rightly notes "to the financial management profit is the test of efficiency and measure of control to the owners a measure of the worth of their investment, to the creditors the margin of safety to the government a measure of taxable capacity and a basis of legislative and to the country profits is an index of economic progress, national income generated and the rise in the standard of living" while profitability is an outcome of profit. In other words, no profit drives towards profitability.

2.1.3 Profitability Measurement

Profitability is one of the most significant parameters to measure the financial performance of business. It is nothing but the capacity of business to earn profits in the normal course of its operations. The term profitability is different from the profits earned by business. Profits refer to a situation when the value of businesses' output exceeds the cost of its input. Whereas, the term profitability refers to the ability of business to earn a return on a given investment. Thus, profitability is the primary goal of all business ventures. No business can survive in the long run without profitability. Therefore, a

business that has higher profitability has the capacity to reward its owners with a greater return on their investment, operationally efficient, the capacity to meet its short-term obligations, and indicates the public acceptance of its product and its competitiveness (Early, 2013).

According to Kihunt and Huzinga (2012), there are various ways of measurement of profitability. These include calculating profitability ratios, undertaking breakeven analysis, and determining return on assets and investments.

1. **Margin or Profitability Ratios**

Profitability ratios refer to the financial metrics used to assess business's ability to generate earnings as against its revenue, operating costs, assets, or shareholder's equity. These ratios indicate how well your business makes use of its resources to generate profits and create value for its shareholders. Furthermore, businesses generally seek higher profitability ratios as it typically means that the business is performing well in terms of generating revenues, profits, and cash flows. Profitability Ratios are most useful when they are compared to business' past financial data, industry's average ratios, or ratios of similar companies (Kihunt & Huzinga, 2012).

2. **Break-Even Analysis**

Break-even is a point where business expenses equal business revenues. This means that business is running into losses until it reaches its break-even point. In other words, the costs for material, labor, rent, and other expenses are greater than gross revenues when business is yet to reach its break-even. However, business revenues exceed expenses once it crosses the break-even point. This means that a dollar of sales generated contributes to

business profits after the break-even point. It is after the break-even point that business starts generating profits. Accordingly, break-even analysis is a simple tool. It helps to determine the relationship between business revenue, product costs, and the sales volume (Kihunt & Huzinga, 2012).

So, it is extremely beneficial to evaluate business's break-even point. This is because it tells if business is generating profits or running into losses. In case business generates profits, it tells the amount of buffer and one should revenues decline. However, if business is running into losses, business's break-even point would indicate how far business is from earning profits.

3. Return on Assets and Return on Investments

Return ratios indicate company's ability to generate returns for its shareholders. These ratios typically compare a return metric with certain balance sheet items (Kihunt & Huzinga, 2012). The commonly used return ratios include return on assets, return on equity, and return on investments:

a) Return on Assets (ROA)

Return on assets ratio is a profitability ratio that indicates the profitability of business compared to its total assets. This ratio measures the relationship between the profits business generates and the assets that are being used. Thus, the return on assets ratio indicates the efficiency with which business utilizes its assets. Accordingly, the higher the return, the more productive and efficient business is in utilizing its economic resources. Though, comparing profits to revenue is a good way to assess the operational efficiency of business. However, comparing profits to business's assets or resources

utilized to earn such profits indicates the likeliness of company's existence (Kihunt & Huzinga, 2012).

Formula for Return on Assets

$$\text{Return on Assets} = \frac{\text{Net Income After Tax}}{\text{Total Assets}}$$

Here, net income is nothing but sales minus cost of goods sold, selling, general, and administrative expenses, depreciation, interest, taxes, and other expenses.

b) **Return on Equity (ROE)**

Return on Equity is a financial metric that measures the financial performance of business. It indicates the amount of net income earned as a percentage of shareholder's equity. Thus, ROE presents a total return on the equity capital of business. That is to say, it showcases business's ability to turn equity investments into profits. Also, one can compare business's ROE to the industry's average and understand the competitive advantage of business relative to the other firms in the industry. Such a financial metric also gives insights with regards to the efficiency with which one is using equity financing to grow business (Kihunt & Huzinga, 2012).

Formula for Return on Equity

$$\text{Return on Equity} = \frac{\text{Net Annual Income}}{\text{Shareholder's Equity}}$$

The Net Income is nothing but the sales minus the cost of goods sold, selling, general, and administrative expenses, operating expenses, depreciation, interest, taxes, and other expenses. Whereas, Shareholders' Equity is business total assets less total liabilities.

c) **Return on Investments (ROI)**

Return on investment is a financial metric used to determine the efficiency of business's investment. It is a performance measure that compares the extent as well as the timing of gains from investment to the extent and timing of costs. Thus, ROI is used as a tool to measure the profitability of business's investment. Such a return may include the return that business expects to generate by expanding its operations on a stock investment or real estate. ROI is typically expressed as a percentage rather than a ratio (Kihunt & Huzinga, 2012).

The Formula for Return on Investment

ROI can be calculated using the following methods:

i. **Method I:**

$$\text{Return on Investment} = \frac{\text{Net Return on Investment}}{\text{Cost of Investment)}} \times 100$$

ii. Method II:

$$\text{Return on Investment} = \frac{\text{Current Value of Investment} - \text{Cost Investment}}{\text{Cost of Investment}}$$

Here, the current value of an investment refers to the value obtained from the sale of the investment (Kihunt & Huzinga, 2012).

2.1.4 Determinants of Capital Structure

In selecting an appropriate capital structure for the firm, the financed manager puts into consideration a number of factors which includes the nature of the business, cost of obtaining fund (cost of capital), level of inflation, existing loan agreements, security, risk and ownership control (Omolumo 2013). Past theoretical and empirical studies of

scholars in this field have also shown that profitability, tangibility, Tax, size, non-debt tax shields, growth opportunities, volatility, also have an effect on capital structure (Huang and Song, 2015).

(a) **Firm Size:** several studies show that there is positive relationship between leverage and firm size, Marsh (2012) points that small firms choose short term debt, while large firms more often choose long term debt. Large firms may be able to take advantage of economies of scale in issuing long term debt, and may even have bargaining power over creditors. Therefore, the cost of issuing debt and equity is negatively related to firm size. On the other hand, size may also be a reason for the information that the firms tend to provides. Rajan and Zingles (2015) argue that larger firms tend to disclose more information to outside inventors than smaller ones. In essence, larger firms with less information asymmetry problems should tend to have more equity than debt and therefore have lower leverages. However, larger firms are often more diversified and have more stable cash flow. Therefore, the portability bankruptcy for larger firms is smaller compared with smaller ones, all things being equal, Narayan (2018) also suggest that leverage increases with the value of the company.

(b) **Tangibility**: An important factor in determining capital structure is the tangibility. For instance, an important factor seems to be the ratio of fixed term debt to total assets. The rationale underlying this factor is that tangible assets are easy to collateralize and thus they reduce the agency costs of debt Berger and Udell (2014) showed that firm with close relationship with creditors need to provide less collateral. They argues that this is because the relationship (and more informed

monitoring by creditors substitutes for physical collateral. Studies by Williamson (2018), suggested that tangibility is positively related to leverage. If the firm tangible assets are high, then these assets can be used as collateral, diminishing lenders risk of suffering from firm risk. Such agency assets are expected to be associated with high leverages. Also, the value of tangible assets should be higher than intangible assets in case of liquidation. Harms and Raviv (2019) posit that leverages should increase with liquidation value.

(c) **Profitability**: Despite the fact that much theoretical work has been done since Modigliani and Miller, no consistent predictions have been reached of the relationship between profitability and leverages. Models based on tax posit that profitable firms should borrow more, all things being equal, as they have greater needs to shield incomes from corporate tax. However, pecking order theory suggests that firm will use retained earnings first as investment funds and then more to bonds and new equity if necessary. This is consistent with Jensen and Meckling model which posits that, a manager of a profitable firm will attempts to reduces agency cost of equity by increasing the company's retain financial stock to be able to subside project with positive NPV which internally generates funds. This is also consistent with Myers and Majluf (2014) who argue that more profitable firm will have a lower debt asset ratio. Long and Maliz (2015) also finds leverages to be positively related to profitability but the relationship is not statistically significant. Wald (2019) posits that profitability has the largest single effect on capital structure.

(d) **Growth opportunities**: Though, theoretical studies generally suggest growth opportunities as negatively related with leverages, Jung, Kim and Stulz (2016) noted that if management pursues growth objectives, management and shareholders interest tend to coincide for firms with strong investment opportunities. But, for firms lacking investment opportunities, debt serves to limit with the agency costs of managerial discretion as suggested by Jensen & Meckling (2016). Jensen & Meckling (2016) posits that high growth firms may hold more real options for future investment than low growth firms. This means that if high firms needs extra equity financing to exercise such options in future, a firm with outstanding debt may forgo this opportunity because such an investment effectively transfers wealth from stockholders to debt holders. Therefore, firms with high-growth opportunity may not issue debt in the first place and leverage is exacted to be negatively related with growth opportunities.

(e) **Volatility**: Business risk or volatility is a proxy for the probability of financial distress and it is generally expected to be negatively related with leverage. Marsh (2012) based this contingent claim on nature of equity combines the options pricing model (OPM).As the capital asset pricing model the variance of the value of the firm's assets increases, systematic risk of equity decreases. Therefore, the business risk is expected to be positively related with leverages.

(g) **Tax:** The relationship between tax and capital structure formed a foundation for the Modigliani and Miller (1958) study that gave birth to M and M theory. Almost all empirical researchers posit that tax must be important to company's capital structure. Firms with a higher effective marginal tax rate should use more debt to

obtain a tax-shield gain. Mackie-Mason (2015) contrary to other researchers studies the incremental financing decision using discrete choice analysis. He emphasizes specifically on the effect of credit upon debt - equity choice and finds that the desirably of debt financing at the margin with the effective marginal tax rate, which is consistent with M and M theorem.

(h) **Market-to-Book:** The theory predicts that firms with high market-to-books ratios have higher cost of financial distress or tendency to liquidate which is why the negative correlation is expected. There may be other reasons for why the market-to-book ratio is negatively correlated with leverages. For instance, Fama and French (2012) suggest that the shares of firms in financial distress (i.e. high leverage) may be discounted at a higher rate because distress risk is priced. If this predominant view is taken, Rajan and Zingales (2015) argues that negative correlation should be driven largely by firm low market-to-book ratios. However, in fact the negative correlation appears to be driven by firms with high market-to-book ratios.

2.1.5 Types of Capital Structures

The nature of capital structure adopted by different firms varies. Nwude (2013) categorized capital structure in to three (3) types:

(a) **Zero Geared or Zero Leveraged Capital Structure:** Zero leveraged capital structure means the absence of any form of leverage in the capital structure. It indicates that there is no element of debt in the financing of the firms' operation. Here, the firm prefers to go all equity financing and forfeits the positive aspect to debt financing which boosts residual owners wealth.

(b) Low Geared or Low Leveraged Capital Structure: Low-leveraged capital structures have a low debt/equity ratio. This indicates that residual owner's contribution (equity) higher than the claims of creditors in the business. This is most times regarded as a satisfactory capital structures.

(c) High Geared or High Leveraged Capital Structure: A firm is said to be high-leveraged if the contribution of the creditors is higher than that of equity holders. This type of capital structure will enhance the earnings of ordinary shareholders when the cost of debt is less than the firm's overall rate of return on investment.

Dare and Sola (2015), contributed to the possible types of capital structure by stating that the debt – equity mix can take any of the following forms: 100% equity: 0% debt, 0% equity: 100% debt and X% equity Y% debt. From these three alternatives, option one is that of the unlevered firm, that is, the firm avoids the advantage of leverage (if any). Option two may not actually be realistic or possible in real life economic situation because no provider of funds will invest his money in a firm without equity capital. This partially explains the term "trading on equity", that is, it is the equity element that is present in the firm's capital structure that encourages the debt providers to give their scarce resources to the business. Option three is the most realistic one, in that it combines both a certain percentage of debt and equity in the capital structure and thus, the advantages of leverage (Dare and Sola, 2015).

2.1.6 Elements of Capital Structure

A company formulating its long term financial policy should analyze its current financial structure. In the process of analysis, the following elements of a company's financial structure should be explained in detail.

(a) Capital Mix: The firm has to choose decisively the mix of debt and equity capital the firm will like to employ. The sources of debt to be employed, the proportion of debt, and the mix of debt instrument, how reasonable are the debt instruments in relation to the risk involved are basic questions in determining the capital mix with the use of debt ratios, and fund flow statement for analysis.

(b) Financial Innovations: Firms' may raise capital either through the issue of simple securities or through the issue of innovative securities. Financial innovations are intended to make the security issue attractive to investors and reduce the cost of capital. Innovations could include issue varieties of option linked securities, higher simple interest rate on debentures, offer to convert interest amount to equity, issue of convertible debentures at lower rate rather than non-convertible debentures at higher interest rate. The financial manager will have to continuously design innovative securities to be able to reduce cost.

(c) Maturity and Priority: The maturity and properties of the securities used in the capital mix differ. While equity is the most permanent capital, for debt, commercial paper has the shortest maturity and public debt has the longest maturity. Lenders see capitalized debt like lease or hire purchase finance. The value of assets backing the debt is a means of protection while collateralized or securities debts are relatively safe and have priority over unsecured debt in the event of insolvency.

(d) Terms and Conditions: The terms and conditions pertaining to interest payment form a basis for the firm's choice. The firm may obtain loans at fixed or floating interest rates. For equity, the firm may like to return income in the form of large dividends or large capital gains. The firm's choice on the basis of payment indicates

the management's assessment about the future interest rates and a firm's earnings. Other terms and conditions that a firm should consider includes the lending criteria used by suppliers of capital, how negative and positive conditions affect the operations of the firm, the ability of the firm to comply with the terms and conditions.

2.2 Empirical Studies

Over the past several decades' corporate finance researchers have devoted considerable efforts to transform rationalism of capital structure into empiricism. The problem of developing a conclusive theory of capital structure and designing empirical tests those are powerful enough to provide a basis for choosing among the various theories is still unresolved. The literature on the relationship between firm performance and capital structure has produced mixed results (Taani, 2013). Hence, the relationship between capital structure and firm value has been the subject of considerable debate. Apart from the seminal work of Modigliani and Miller (1958) emphasizing on the irrelevance theory of capital structure and their subsequent revision taking in to account the tax benefit of debt financing Modigliani and Miller (1963), as well as succeeding arguments and researches such as Static Trade-off Theory of Myers (1984) and pecking order theory of Myers and Majluf (1984) which argues in the contrary of static trade-off theory, there are empirical studies that emphasis on the relationships between capital structure and profitability/performance of firms.

Salim and Yadav (2012) examined the relationship between capital structure and firm performance. The investigation was performed using panel data procedure for a sample of 237 Malaysian listed companies on the Bursa Malaysia Stock exchange during 1995-

2011. The findings of this study suggest that there is a significantly positive relationship between Tobin's Q (firm performance) and capital structure measured by LTD and STD. Finally, the results show that Tobin Q has a positive and significant relationship with size (as control variable) for all sectors under study except for property sector a negative effect on the Tobin's Q observed.

Farhad and Aliasghar (2013) also studied the relationship between capital structure and Profitability using data from 252 non-financial companies in the period from 1999 to 2008 in Tehran Stock Exchange. Consistent with earlier theories, found a positive association between the return on equity (ROE) and short-term debt. This suggests increasing short-term debts with low interest rate will lead to increase in profitability. Furthermore, the results revealed a negative association between ROE and long-term debt. So, when firms increase long-term debts, this results to decrease in profitability. Finally, the results also indicate a positive relationship between ROE and total debt.

Abor (2015) investigated the relationship between capital structure and profitability of listed firms on the Ghana Stock Exchange (GSE) during a five-year period (2008-2012). Panel data methodology and regression analysis were used in the estimation of functions relating the return on equity (ROE) with measures of capital structure. And, the finding revealed a significantly positive relation between the ratio of short-term debt to total assets and ROE. However, a negative relationship between the ratio of long-term debt to total assets and ROE was found. This implies that an increase in the long-term debt position is associated with a decrease in profitability. With regard to the relationship between total debt and return rates, the results show a significantly positive association between the ratio of total debt to total assets and return on equity.

Shubita and Alsawalhah (2017) extend Abor's (2015), and Gill (2017) findings regarding the effect of capital structure on profitability by examining the effect of capital structure on profitability of the industrial companies listed on Amman Stock Exchange during a six-year period (2004-2009). The study sample consists of 39 companies and applied correlations and multiple regression analysis. The results revealed significantly negative relation between debt and profitability. These findings imply that an increase in debt position is associated with a decrease in profitability; thus, the higher the debt, the lower the profitability of the firm. The results also show that profitability increases with control variables; size and sales growth. The findings of this paper contradict with prior empirical studies like Abor (2015). Yet recommendations based on findings are offered to improve certain factors like the firm must consider using an optimal capital structure and future research should investigate generalizations of the findings beyond the manufacturing sectors.

Opoku, Adu, and Anarfi (2013) also studied the impact of capital structure and profitability of listed banks on the Ghana Stock Exchange using a panel data methodology. Capital structure theories were utilized to provide the theoretical basis for the work. The study considered all the 9 banks listed on the Ghana Stock Exchange over the period 2005-2012. The distribution patterns of data and applied statistical techniques used in the study include descriptive statistics, correlation analysis and regression analysis. The finding reviled that, profitability measured by returns on equity is inversely and significantly influenced by the total leverage ratio which is also dependent of the capital structure of the banks. The debt equity ratio of the bank has a positively significant relationship with returns on equity. The capital structure variable, total

liabilities of the listed banks also recorded statistics clearly indicating that, the total liabilities of the listed banks does not make a significant contribution on their return on equity. As far as the size of the banks is concerned, the study reveals that the size of the banks does not have a significant impact on their returns on equity. However there was a sort of positive relation between the two variables during the study period. Meanwhile, the results for returns on equity and their years of operation had a significantly negative relationship between them, meaning as the banks grow in age, their profitability levels reduces significantly. The relationship between Capital Structure and Profitability, as well as the impact of Capital Structure on Profitability across the banks by returns on equity, reveals that the profitability of the listed banks on the Ghana Stock Exchange decreases significantly with increase in their total leverage. Therefore there is a clear indication that, Capital Structure has a significant impact on the profitability of the listed banks on the Ghana Stock Exchange. Also at an average total leverage ratio of about 76%, there exist a negative relationship between profitability and capital structure therefore indicating that, the optimal capital structure for the sector is definitely not 76% or more.

In addition to the above studies in banking industries, Goyal (2013) also investigated the impact of capital structure on profitability of public sector banks in India listed on national stock exchange during 2008 to 2012. Panel data and multiple regression models were used to find out the association between capital structure characteristics and banks performance in the context of India. The findings of study validated a strong positive dependence of short term debt to capital (STDTC) on all profitability measures (ROA, ROE and EPS). Whereas, Long term debt to capital (LTDTC) & TDC having a negative

relationship with return on assets (ROA), return on equity (ROE) and earnings per share (EPS). Firm size (SIZE) experienced an optimistic connection with variables (ROA, and EPS) and negative with ROE. Assets growth (AG) proposed a positive relationship with return on asset and return on equity and earnings per share.

In their study of the Effect of Capital Structure on the Performance of Palestinian Financial Institutions, Abbadi and Abu-Rub (2012) used Return on Equity (ROE) as accounting performance measure while Tobin's Q was used to measure the market performance of the firms. Using Multiple Linear Regression they found strong correlation between return on assets and efficiency; and total deposit to total assets and efficiency. The same variables have the same effect on market value while loans have a weak effect.

In Ethiopia, there is no empirical study directly related with the subject matter of this study, "The impact of capital structure on profitability of Commercial Banks of Ethiopia" with an emphasis on core business operations profitability of banks. However, there are a few studies in some areas of corporate finance. Usman (2013) examined the determinants of capital structure of large taxpayer share companies in Ethiopia. Econometric analysis were performed for a panel of 37 listed companies in Ethiopian Revenue and Customs Authority (ERCA) large taxpayers' branch office in Addis Ababa for the study period of 2006–2010. As a result of the improvement in the existing estimation methods that enables to employ cross-sectional and time-series data concurrently, random-effect panel data regression was applied to study the effect of selected independent variables on capital structure. The result showed that size, age, tangibility, liquidity position and non-debt tax shield of a company are positively

correlated with leverage, whereas profitability, earnings volatility and dividend payout ratio are negatively associated with leverage. Growth variable was found to be statistically insignificant in affecting leverage of large taxpayer share companies in Ethiopia. Based on the sign of these relations the Author also indicated that, Agency cost theory provide more convincing evidence than other capital structure theories in elucidating the capital structure of large taxpayer share companies in Ethiopia.

Furthermore, from empirical studies in the banking sector of Ethiopia Weldemikael (2012) examined the relationship between leverage and firm specific (profitability, tangibility, growth, risk, size and liquidity) determinants of capital structure decision, and the theories of capital structure that can explain the capital structure of banks in Ethiopia using a mixed method research approach by combining documentary analysis and in-depth interviews. More specifically, the study used twelve years (2000 - 2011) data for eight banks in Ethiopia. The findings reviled that profitability, size; tangibility and liquidity of the banks are important determinants of capital structure of banks in Ethiopia. However, growth and risk of banks are found to have no statistically significant impact on the capital structure of banks in Ethiopia. In addition, based on the results of the analysis the Author indicated that pecking order theory is pertinent theory in Ethiopian banking industry, whereas there are little evidence to support static trade-off theory and the agency cost theory. Hence, the author recommended banks to give due consideration to profitability, size, liquidity and tangibility in their determination of optimum capital structure.

On the other hand, Amdemikael (2012) also assessed the factors that affect bank profitability in Ethiopia covering the period of 2000-2011. Mixed research approach (data obtained through the structured document reviews and in-depth interviews) were applied. The analysis also managed through the multiple linear regressions model, OLS. The result indicated that capital strength is one of the main determinants of profitability of banks in Ethiopia.

2.4 Theoretical Framework

This theoretical review part of the study is all about the review of the theories of capital structure and profitability or firm value. Ross (2013) states that a corporation can raise money (cash) from lenders or from shareholders. If it borrows, the lenders contribute the cash, and the corporation promises to pay back the debt plus a fixed rate of interest. If the shareholders put up the cash, they get no fixed return, but they hold shares of stock and therefore get a fraction of future profits and cash flow. The shareholders are equity investors, who contribute equity financing. The choice between debt and equity financing is called the capital structure decision. Capital refers to the firm's sources of long-term financing. Corporations raise equity financing in two ways. First, they can issue new shares of stock. The investors who buy the new shares put up cash in exchange for a fraction of the corporation's future cash flow and profits. Second, the corporation can take the cash flow generated by its existing assets and reinvest the cash in new assets. In this case the corporation is reinvesting on behalf of existing stockholders. No new shares are issued. What happens when a corporation does not reinvest all of the cash flow generated by its existing assets? It may hold the cash in reserve for future investment, or it may pay the cash back to its shareholders. Business is inherently risky. The financial

manager needs to identify the risks and make sure they are managed properly. For example, debt has its advantages, but too much debt can land the company in bankruptcy (Brealey, Myers, & Allen, 2017).

Financing arrangements determine how the value of the firm is sliced up. The firm can determine its capital structure. That is, the firm might initially have raised the cash to invest in its assets by issuing more debt than equity; now it can consider changing that mix by issuing more equity and using the proceeds to buy back some of its debt. Financing decisions like this can be made independently of the original investment decisions. The decisions to issue debt and equity affect how the pie is sliced (Ross, 2013). A number of theories have been advanced in explaining the capital structure and profitability / value of firms. The existing theories of capital structures and profitability/ firm value are explained as follows.

2.4.1 Modigliani and Miller (MM) Theory

In corporate finance theories, the seminal work by Modigliani and Miller (1958) in capital structure provided a basis for the development of the theoretical framework within which various theories were about to emerge in the future. Modigliani and Miller (1958) concluded to the broadly known theory of "capital structure irrelevance" where financial leverage does not affect the firm's value. However, their theory was based on very restrictive assumptions that do not hold in the real world. These assumptions include no taxes, no transaction costs, homogenous expectations, and perfect capital markets. The existence of bankruptcy costs and tax advantageous of interest payments lead to the concept of an "optimal" capital structure which maximizes the value of the firm, and

hence minimizes its total cost of capital. Modigliani and Miller (1958) reviewed their earlier position by incorporating tax benefits as determinants of the capital structure of firms. The key feature of taxation is that interest is a tax-deductible expense. A firm that pays taxes receives a partially offsetting interest "tax-shield" in the form of lower taxes paid. Hence, Modigliani and Miller (1963) proposed to use as much debt capital as possible in order to increase profitability and hence maximize the value of firms.

2.4.2 Static Trade-Off Theory

Capital structure theories have diverse views on the relationship between leverage and profitability. The trade-off theory argues that firms generally prefer debt for tax considerations. Profitable firms would, therefore, employ more debt because increased leverage would increase the value of their debt tax shield (Myers, 1984). It states also that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. Apart from the tax advantage of debt, agency and bankruptcy costs may encourage highly profitable firms to have more debt in their capital structure. This is because highly profitable firms are less likely to be subject to bankruptcy risk because of their increased ability to meet debt repayment obligations. Thus, they will demand more debt to maximize their tax shield at more attractive costs of debt. For these considerations, the trade-off theory predicts a positive relationship between leverage and profitability.

2.4.3 Pecking Order Theory

The pecking order theory of Myers and Majluf (1984) argues in the contrary of static trade-off theory. It advocates also that the firm will borrow, rather than issuing equity,

when internal cash flow is not sufficient to fund capital expenditures. Thus the amount of debt will reflect the firm's cumulative need for external funds. It concludes a negative association between leverage and profitability because high profitable firms will be able to generate more capitals through retained earnings and then have less leverage. Therefore, it is expected that there is negative relationship between leverage and profitability ratio.

2.4.4 Agency Cost Theory

Agency theory focused on the costs which are created due to conflicts of interest between shareholders, managers and debt holders. Harris and Raviv (1991) explained the three types of agency costs which can help explain the relevance of capital structure as follows;

i. **Asset substitution effect**: As D/E increases, management has an increased incentive to undertake risky (even negative NPV) projects. This is because if the project is successful, shareholders get all the upside, whereas if it is unsuccessful, debt holders get all the downside. If the projects are undertaken, there is a chance of firm value decreasing and a wealth transfer from debt holders to shareholders.

ii. **Underinvestment problem**: If debt is risky (e.g. in a growth company), the gain from the project will accrue to debt holders rather than shareholders. Thus, management has an incentive to reject positive NPV projects, even though they have the potential to increase firm value.

iii. **Free cash flow**: unless free cash flow is given back to investors, management has an incentive to destroy firm value through empire building and perks etc. Increasing leverage imposes financial discipline. The free cash flow theory says that dangerously high debt levels will increase value, despite the threat of financial distress, when a

firm's operating cash flow significantly exceeds its profitable investment opportunities. The free cash flow theory is designed for mature firms that are prone to overinvest. Due to the free cash flow theory of Jensen (1986) agency cost theory supports a positive relationship between capital structure and profitability.

2.5 Summary of the Chapter

The chapter reviewed seminal work by Modigliani and Miller (1958) in capital structure provided a basis for the development of the theoretical framework within which various theories were about to emerge in the future. Modigliani and Miller (1958) concluded to the broadly known theory of “capital structure irrelevance” where financial leverage does not affect the firm’s value. By incorporating tax benefits as determinants of the capital structure of firms, Modigliani and Miller (1953) proposed to use as much debt capital as possible in order to maximize the value of firms. Furthermore, as stated in the theoretical framework, subsequently a number of concepts profitability/firm value and theories of capital structure such as the static trade-off theory, pecking order theory and agency cost theory were developed. These theoretical concepts also tested by different empirical studies of different researchers in different business sectors around the world.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This chapter gives a detailed description of the various research procedures adopted in the collection of data and the techniques used in presentation and analysis of data in the following order: Research design, area of the study, population of the study, sample size and sampling techniques, instrument for data collection, validity and reliability of the instrument, method of data collection, method of data presentation and analysis.

3.2 Area of the Study

The study was restricted to Bank of Industry (BOI), located at 18 Muhammadu Buhari Way, Kaduna State, Nigeria.

3.3 Population of the Study

The population for this study was made up of sixty eight (68) which comprised of management and staff of Bank of Industry (BOI), Kaduna.

3.4 Sample Size and Sampling Techniques

The sampling technique used in this work was stratified sampling technique because of its probability nature in the sense that everybody has equal chance of being selected. Yamane formula was adopted in determining the sample size for this study, given as follows:

$$n = \frac{N}{1+ N (e)^2}$$

Where:

n = Sample size

N = Population

e = Limit of tolerance error/margin of error

1 = Constant

N = 68 and e = 5% i.e. 0.05

$$n = \frac{68}{1+68\ (0.0025)}$$

$$n = \frac{68}{1+0.17}$$

$$n = \frac{68}{1.17} = 58.1197$$

$$n = \underline{\underline{58}}$$

Therefore, the sample size for the study is 58.

3.5 Instrument for Data Collection

Primary and secondary methods of data collection were both used in this study. The secondary data were generated from published and unpublished text materials while primary data consists of a number of items in well-structured questionnaire that was administered to the respondents. The decision to structure the questionnaire is predicated on the need to reduce variability in the meanings possessed by the questions as a way of ensuring compatibility of responses. The questionnaire were developed by the researcher based on five points Likert rating scale of Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. The 5 points Likert scale is shown thus:

	SA	A	UD	D	SD
Grade Point	5	4	3	2	1
Range	4.5-5.0	3.5-4.4	2.5-3.4	1.5-2.4	0.5-1.4

Key:

SA - Strongly Agree = 5

A - Agree = 4

UD – Undecided = 3

D - Disagree = 2

SD - Strongly Disagree = 1

3.6 Validity and Reliability of the Instruments

One important way of ensuring that the right instrument has been used and correct measurement taken is that the outcome must be in consonance with two major criteria for measuring quality known as validity and reliability (Osuala, 2009). Validation by experts as opined by Nwana (2013) is an effective method for content validation of research instrument.

To obtain the validity of an instrument, three experts were required to vet and cross-check the items generated in the questionnaire in order to ensure accuracy and clarity of the instrument. The facial validation was done by the supervisor of this project, Mal. Bello Usman as well as Mr. Tunde Lawal and Mr. Kayode Adejumo. Their modifications and corrections resulting from their observation and constructive criticisms was used in improving the final draft.

Reliability has to do with consistency obtained from the results of the application of the instruments. An instrument is reliable if it consistently gives the same or similar result. To obtain reliability for factual questions, Ogbu (2014) suggest that internal checks the form of logical test to the questionnaire should be conducted. In line with this, a number of questions will be built into the questionnaire to give a clue on the respondents' consistency of response.

Besides, pilot study was conducted on 10 staff of the organization to pre-test the efficacy of the questionnaire. This was meant to test the appropriateness of the items in the questionnaire to elicit the needed responses. The choice of a small sample for pilot study is in agreement with the view held by Nworgu (2010) who opined that pilot testing is usually done on a smaller scale than the main study but under similar conditions. And the 10 staff to be used in the pilot study was not participated in the actual study.

3.7 Method of Data Collection

The researcher personally collected all the data for the study from the staff of Bank of Industry (BOI), Kaduna. After distributing the questionnaire, respondents were given 5 days to fill the questionnaire. This timeframe was given in order to give ample opportunity to the respondents to reflect on the items generated on the questionnaire to facilitate valid response.

3.8 Method of Data Presentation and Analysis

Data collected from the respondents were presented in tables and analyzed accordingly with the aid of arithmetic mean and simple percentage. The choice of these tools was

because they are very convenient and more appropriate to enable the readers to comprehend the findings of the study.

i. Simple Percentage: This was used in the analysis of each of the questions relating to respondents' demographic variables.

ii. Mean Score: This was adopted in analyzing each variable in the questionnaire.

The mean score has the formula given by the equation below:

$$\text{Mean } (X) = \frac{\sum fx}{\sum f}$$

Where:

$\sum$ = Summation

f = Frequency

x = Variables

Each value of the acronyms on the 5 point likert scale was multiplied by the corresponding frequency of the variable. The frequency (f) column was multiplied by (x) to get function of x (fx). The mean score of each of the variable was obtained by dividing the sum total of (fx) by the sum of (f).

$$\frac{5 + 4 + 3 + 2 + 1}{5} = \frac{15}{5} = 3.0$$

Therefore, the mean scores of 3.0 and above were regarded as agreed responses, while points below the mean average of 3.0 were treated as disagreed responses.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the analysis of the data collected in the course of the study. The data collected and presented with the aid of a frequency distribution table. A total number of 58 questionnaires were produced and administered out of which 50 were filled and returned. The 50 questionnaires formed the basis for the data analysis and interpretation.

4.2 Characteristics and Classification of Respondents

Table 4.2.1: Sex of Respondents

Sex Category	Frequency	Percentage (%)
Male	38	76
Female	12	24
Total	**50**	**100**

Source: Field Study, 2022

The above table indicates that 76% of the respondents were male while the remaining 24% of the total respondents were female. This implies that there are more male than the female in the organization.

Table 4.2.2: Age of Respondents

Age Category	Frequency	Percentage (%)
20-29 years	10	20
30-39 years	20	40
40-49 years	14	28
50 years and above	6	12
Total	**50**	**100**

Source: Field Study, 2022

The table above indicates that 20% of the total respondents had their ages between 20-29 years, 40% of the respondents had age ranging between 30-39 years, 28% of the respondents belong to age bracket of 40-49 years while the remaining 12% of the total respondents fall between the age range of 50 year and above. This shows that there are more of respondents within the age range of 30-39 years in the organization, and which implies that most of respondents are within the active and productive age of their career.

Table 4.2.3: Respondents' Educational Qualification

Educational Qualification	Frequency	Percentage (%)
NCE/ND	11	22
HND/B.Sc	34	68
Postgraduate	5	10
Total	**50**	**100**

Source: Field Study, 2022

Table 4.2.3 above indicates that 22% of the respondents are NCE/ND holders, 68% of the respondents are HND/B.Sc holders, while the remaining 10% of the respondents were postgraduate degree holders. This implies that there are more HND/B.Sc holders than other qualifications in the study area.

4.3 Data Presentation and Analysis

This section presents the data and discusses the findings of the study, which set out to examine the effect of capital structure on profitability of Bank of Industry (BOI), Kaduna. The findings were based on analysis of the 50 valid responses from the respondents.

Table 4.3.1: To what extent does short term debts have an effect on the profitability of Bank of Industry (BOI), Kaduna?

S/N	Variable		SA	A	UD	D	SD	∑FX	X	Remark
1	Short-term debt naturally accompanies higher incomes, faster growth, and greater openness to bank.	f x fx	10 5 50	20 4 80	4 3 12	10 2 20	6 1 6	50 168 50	3.4	Agree
2	Short-term debt ensures that cash is available to satisfy the operating capital needs of a bank.	f x fx	12 5 60	22 4 88	7 3 21	6 2 12	3 1 3	50 184 50	3.7	Agree
3	Short-term debt literally keeps a business running during times when the revenue stream temporarily is insufficient to meet operational needs.	f x fx	14 5 70	18 4 72	9 3 27	6 2 12	3 1 3	50 184 50	3.7	Agree
4	Short-term debt provides a business with ready cash to initiate an expansion program.	f x fx	16 5 80	26 4 104	0 3 0	4 2 8	4 1 4	50 196 50	3.9	Agree
5	Short-term debt assists a business in dealing with an emergency situation.	f x fx	14 5 70	20 4 80	2 3 6	4 2 8	10 1 10	50 174 50	3.5	Agree

Source: Field Survey, 2022.

Grand Mean = $\frac{18.2}{5}$ = 3.6 (Agree)

From the table illustrated above, it shows that variable 1, 2, 3, 4 and 5 were accepted with the mean scores of 3.4, 3.7, 3.7, 3.9 and 3.5 respectively which are all higher than the cut-off point of 3.0. This implies that short-term debt has effect on the profitability of Bank of Industry (BOI), as it naturally accompanies higher incomes, faster growth, and greater openness to bank; ensures that cash is available to satisfy the operating capital needs of

a bank; literally keeps a business running during times when the revenue stream temporarily is insufficient to meet operational needs; provides a business with ready cash to initiate an expansion program; and assists a business in dealing with an emergency situation.

Table 4.3.2: How does long term debt affect the profitability of Bank of Industry (BOI), Kaduna?

S/N	Variable		SA	A	UD	D	SD	∑FX	X	Remark
6	Long-term debt essentially leverages earnings to grow the bank.	f	16	28	0	4	2	50	4.0	Agree
		x	5	4	3	2	1	202		
		fx	80	112	0	8	2	50		
7	Long-term debt leverages for owner's equity.	f	12	30	2	4	2	50	3.9	Agree
		x	5	4	3	2	1	196		
		fx	60	120	6	8	2	50		
8	Long-term debt leads to no or minimal investor interference.	f	18	26	0	6	0	50	4.1	Agree
		x	5	4	3	2	1	206		
		fx	90	104	0	12	0	50		
9	Long-term debt builds business credit.	f	14	24	4	4	4	50	3.8	Agree
		x	5	4	3	2	1	190		
		fx	70	96	12	8	4	50		
10	Long-term debt usually has fixed interest rates that translate into consistent monthly payments and high predictability.	f	17	24	3	4	2	50	4.0	Agree
		x	5	4	3	2	1	200		
		fx	85	96	9	8	2	50		

Source: Field Survey, 2022.

Grand Mean = $\frac{19.8}{5}$ = 4.0 (Agree)

From the table illustrated above, it shows that variable 6, 7, 8, 9, and 10 were accepted with the mean score of 4.0, 3.9, 4.1, 3.8, and 4.0 respectively which are all higher than

the cut-off point 3.0. This implies that long-term debt has effect on the profitability of Bank of Industry (BOI) as it essentially leverages earnings to grow the bank; leverages for owner's equity; leads to no or minimal investor interference; builds business credit; and usually has fixed interest rates that translate into consistent monthly payments and high predictability.

Table 4.3.3: To what extent does equity financing affect the profitability of Bank of Industry (BOI), Kaduna?

S/N	Variable		SA	A	UD	D	SD	∑FX	X	Remark
11	Equity financing offers companies an alternative funding source to debt.	f x fx	16 5 80	22 4 88	4 3 12	4 2 8	4 1 4	50 192 50	3.8	Agree
12	Equity financing provides invaluable assistance in the form of business contacts, management expertise, and access to other sources of capital.	f x fx	18 5 90	21 4 84	5 3 12	4 2 8	2 1 2	50 199 50	4.0	Agree
13	Equity financing is committed to business and intended projects.	f x fx	10 5 50	30 4 120	2 3 6	6 2 12	2 1 2	50 190 50	3.8	Agree
14	Equity financing helps investors have a vested interest in the business' success, growth, profitability and increase in value.	f x fx	10 5 50	15 4 40	12 3 36	8 2 16	5 1 5	50 147 50	3.0	Agree

Source: Field Survey, 2022.

Grand Mean = $\frac{14.6}{4}$ = 3.7 (Agree)

From the table illustrated above, it shows that variable 11, 12, 13, and 14 were accepted with the mean score of 3.8, 4.0, 3.8, and 3.0 respectively which are all higher than the cut-off point 3.0. This implies that equity financing has effect on the profitability of Bank of Industry (BOI) as it offers companies an alternative funding source to debt; provides invaluable assistance in the form of business contacts, management expertise, and access to other sources of capital; committed to business and intended projects; and helps investors have a vested interest in the business' success, growth, profitability and increase in value.

4.4 Summary of Findings

Having carefully analyzed and interpreted the data collected, the following findings were obtained.

1. Short-term debt has effect on the profitability of Bank of Industry (BOI), as it naturally accompanies higher incomes, faster growth, and greater openness to bank; ensures that cash is available to satisfy the operating capital needs of a bank; literally keeps a business running during times when the revenue stream temporarily is insufficient to meet operational needs; provides a business with ready cash to initiate an expansion program; and assists a business in dealing with an emergency situation.
2. Long-term debt has effect on the profitability of Bank of Industry (BOI) as it essentially leverages earnings to grow the bank; leverages for owner's equity; leads to no or minimal investor interference; builds business credit; and usually has fixed interest rates that translate into consistent monthly payments and high predictability.

3. Equity financing has effect on the profitability of Bank of Industry (BOI) as it offers companies an alternative funding source to debt; provides invaluable assistance in the form of business contacts, management expertise, and access to other sources of capital; committed to business and intended projects; and helps investors have a vested interest in the business' success, growth, profitability and increase in value.

4.5 Discussion of Findings

The data presented and analyzed were not just revealing but deserve further discussion thus:

Research Question 1: *To what extent does short term debts have an effect on the profitability of Bank of Industry (BOI), Kaduna?*

In providing answer to the above research question, variables 1, 2, 3, 4 and 5 of the data analyzed in table 4.3.1 with grand mean score of 3.6 which is greater than the cutoff point 3.0 was utilized. This shows that short-term debt has significant effect on the profitability of Bank of Industry (BOI), Kaduna.

Research Question 2: *How does long term debt affect the profitability of Bank of Industry (BOI), Kaduna?*

To provide answer to the above raised research question, variables 6, 7, 8, 9 and 10 of the data analyzed in table 4.3.2 were established with the grand mean of 4.0 which is also greater than the cutoff point 3.0. This implies that long term debt has significant effect on the profitability of Bank of Industry (BOI), Kaduna.

Research Question 3: *To what extent does equity financing affect the profitability of Bank of Industry (BOI), Kaduna?*

In order to answer the above raised research question, variables 11, 12, 13, and 14 of the data analyzed in table 4.3.3 were utilized with the grand mean of 3.7 which is greater than the cutoff point 3.0. This revealed that equity financing has significant effect on the profitability of Bank of Industry (BOI), Kaduna.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study examined the effect of capital structure on profitability of Bank of Industry (BOI), Kaduna. Research questions guided the study. A survey method was used for this study. The population consists of all the management and staff of Bank of Industry (BOI), Kaduna. Out of 58 staff, a sample size of 50 was drawn using stratified sampling technique. A questionnaire developed by the researcher based on 5 point likert scale was used for the collection of primary data for the study.

The instrument was trial-tested on 10 staff of the organization and 58 questionnaires was finally administered to the staff of the organization out of which 50 were validly filled and returned. Data collected for the three research questions were presented in a table analyzed using mean statistics, so as to confirm its degree of conformity with the objectives of the study earlier put forward, and on the basis of which the major findings of the study were revealed and discussed for valid research conclusion and appropriate recommendations.

5.2 Conclusion

Based on the findings of this research, the study concluded that short-term debt has effect on the profitability of Bank of Industry (BOI), as it naturally accompanies higher incomes, faster growth, and greater openness to bank; ensures that cash is available to satisfy the operating capital needs of a bank; literally keeps a business running during times when the revenue stream temporarily is insufficient to meet operational needs;

provides a business with ready cash to initiate an expansion program; and assists a business in dealing with an emergency situation.

More so, the study concluded that long-term debt has effect on the profitability of Bank of Industry (BOI) as it essentially leverages earnings to grow the bank; leverages for owner's equity; leads to no or minimal investor interference; builds business credit; and usually has fixed interest rates that translate into consistent monthly payments and high predictability.

Finally, the study concluded that equity financing has effect on the profitability of Bank of Industry (BOI) as it offers companies an alternative funding source to debt; provides invaluable assistance in the form of business contacts, management expertise, and access to other sources of capital; committed to business and intended projects; and helps investors have a vested interest in the business' success, growth, profitability and increase in value.

5.3 Recommendations

Based on the findings of this study, the researcher recommends the following measures to remedy the problems.

i. The banks management should pay greater attention to the effectiveness of short term debts in order to enhance the profitability of Bank of Industry (BOI), Kaduna.

ii. The managements of BOI should also place greater emphasis on long term debt as a tool for organizational profitability.

iii. The management of banks should give due attention to equity financing in order to affect the profitability of Bank of Industry (BOI) significantly.

REFERENCES

Abbadi, S. M., & Abu-Rub, N. (2012). The Effect of Capital Structure on the Performance of Palestinian Financial Institutions. *British Journal of Economics, Finance and Management Sciences*, 3(2), 92-101.

Abor, J. (2015). The effect of capital structure on profitability: An empirical analysis of listed firms in Ghana. *The Journal of Risk Finance*, 6(5), 438–24.

Adetifa, S.B. (2015). Corporate Finance and Investment Strategy. Lagos: The Chartered Institute of Bankers of Nigeria.

Akinsulire, O. (2012). Financial Management. Lagos: Ceemol Nigeria Limited.

Akintoye, I.R (2018). Effect of capital structure on firms' performance: The Nigerian experience. *European Journal of Economics, Finance and Administrative Sciences*, 10, 233- 243.

Amanuel, M. (2017). *The determinants of capital structure evidence from manufacturing share companies of Addis Ababa*. Addis Ababa: University Press.

Amdemikael, A. (2012). Factors Affecting Profitability: An Empirical Study on Ethiopian Banking Industry. Addis Ababa University, Accounting & Finance. Addis Ababa: Addis Ababa University.

Amidu, M. (2017). Determinants of capital structure of banks in Ghana: An empirical approach. *Baltic Journal of Management*, 2(1), 67–79.

Ashenafi, B. (2015). Determinants of capital structure in medium enterprises in Ethiopia. Master's Thesis, Addis Ababa University.

Bayeh, A. (2017). Capital structure determinants: An empirical study on insurance industry in Ethiopia. Ethiopia: Sengs Publishers.

Booth, L. (2017). Capital Structure in Developing Countries. *The Journal of Finance*, 50(1).

Brealey, R. A., Myers, S. C., & Allen, F. (2017). *Financing Decisions: In Principles of Corporate Finance.* New York: McGraw-Hill/Irwin.

Dare, F.D. & Sola, O. (2015). Organizational Capital Structure. *Journal of Mathematics and Statistics,* 6(2): 168-173.

Fama, E. & French, K. (2012). The Equity Premium. *Journal of Finance*, 57, 637-659.

Farhad, A., & Aliasghar, A. (2013). The Relationship between Capital Structure and Profitability (Case Study in Tehran Stock Exchange). *Technical Journal of Engineering and Applied Sciences*, 3(16).

Goyal, A. (2013). The impact of capital structure on Performance of Listed Public Sector Banks in India. *International Journal of Business and Management Invention*, 2(10), 35-43.

Graham, J. R. (2016). A review of taxes and corporate finance. *Foundations and Trades in Finance*, 1(7), 573–691.

Harris, M., & Raviv, A. (2019). The theory of capital structure. *The Journal of Finance*, 46(1), 297–355.

ICAN Pack (2009). Licensing and Supervision of Banking Business Minimum Capital Requirement for Banks. Directives No. SBB/50/2009. Addis Ababa, Ethiopia: NBE.

Jensen, M., & Meckling, W. (2016). Theory of the firm: Management behavior, agency costs and capital structure. *Journal of Financial Economics*, 3(4), 305–360.

Kurfi, A.K. (2012). Corporate Structure and Lease Financing Practices of Selected Manufacturing Firms in Nigeria. *European Journal of Economics, Finance and Administration Science*, 17, 27-29.

Marsh, P.R. (2012). The choice between equity and debt: An empirical study. *Journal of Finance,* 37, 121- 144.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297.

Myers, S. C., & Majluf, N. S. (2014). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.

Nwude, C. (2015). Basic Principles of Financial Management- A Second Course. Enugu: Chuke Nwabude.

Octavia, M., & Brown, R. (2018). Determinants of Bank capital structure in developing countries. *Research Paper Series*, No. 12.

Omolumo, I.G. (2013). Financial management in Nigeria: A professional Approach. Lagos: Omolum Consult, 2/4 Okota Road, Isolo.

Onaolapo, A.A. & Kajola, S.O. (2015). Capital Structure and Firm Performance: Evidence from Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 25, 1450-2275.

Opoku, E. F., Adu, J. K., & Anarfi, B. O. (2013). The Impact of Capital Structure and Profitability of Listed Banks on the Ghana Stock Exchange. *Social and Basic Sciences Research Review*, 1(2), 74-91.

Osuji, C.C. & Odita, A. (2012). Impact of Capital Structure on the Financial Performance of Nigerian Firms. *Arabian Journal of Business and Management,* 1(12).

Pandy, I. (2012). Capital structure and the firm characteristics: Evidence from an emerging market. *IIMA Working Papers,* No. WP2001-10-04.

Rajan, R., & Zingales, L. (2015). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50, 1-58.

Ross, S. A. (2013). Informational asymmetries, financial structure, and financial intermediation: Discussion. *The Journal of Finance*, 32(2), 412–415.

Salim, M., & Yadav, R. (2012). Capital structure and firm performance: Evidence from Malaysian listed companies. *Procedia-Social and Behavioral Sciences*, 65, 156–166.

Taani, K. (2013). Capital Structure effects on banking performance: a case study of Jordan. *International Journal of Economics, Finance and Management Sciences*, 1(5), 227-233.

Uremadu, S.O. (2014). Bank capital structure, liquidity and profitability evidence from the Nigerian banking system. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 2(1), 98–113.

Usman, M. U. (2013). Determinants of Capital Structure: Empirical Evidence from Large Taxpayer Share Companies in Ethiopia. *International Journal of Economics and Finance*, 6(1), 53-65.

VanHorne, J.C. & Wachowicz, J. (2015). Fundamentals of Financial Management. England: Pearson Education Limited, Edinburgh Gate, Harlow, Essex.

Wald, O.K. (2019). How Firm Characteristics affect Capital Structure. *Journal of Financial Research,* 1, 1-3.

Weldemikael, S. (2012). Determinants of Capital Structure of Commercial Banks in Ethiopia. London: McGraw Hill.

APPENDIX I

INTRODUCTION LETTER

Department of Business Administration,
College of Business & Management Studies,
Kaduna Polytechnic,
Kaduna.

25th April, 2022.

Dear Respondents,

EFFECT OF CAPITAL STRUCTURE ON PROFITABILITY OF BANK OF INDUSTRY (BOI), KADUNA

I am a final year student of the above named institution, currently conducting a research on the above topic. In this regard, you have been duly selected as a respondent. This research is part of the requirement for the Award of Higher National Diploma (HND) in Business Administration and Management. Your response to the attached questions can make the research a tremendous success.

I wish to appeal to you to assist this study by kindly sparing a few minutes to complete this questionnaire. You are not required to disclose your identity. Be rest assured that your responses will be treated in strict confidence and used for the stated academic purpose only.

Thanks.

Yours faithfully,

Samuel Monday
KPT/CBMS/19/46755
The Researcher

APPENDIX II

QUESTIONNAIRE

INSTRUCTION: Please tick [√] the appropriate choice.

SECTION A: Personal Data

1. Gender: (a) Male [ ] (b) Female [ ]
2. Age: (a) 20-29 [ ] (b) 30-39 [ ] (c) 40-49 [ ]
   (d) 50 and above [ ]
3. Educational Qualification: (a) NCE/ND [ ] (b) HND/B.Sc [ ]
   (c) Postgraduate [ ]

SECTION B: Research Questions

The acronyms given in the boxes are

SA = Strongly Agreed

A = Agreed

U = Undecided

D = Disagreed

SD = Strongly Disagreed

Research Question 1: To what extent does short term debts have an effect on the profitability of Bank of Industry (BOI), Kaduna?

S/N	Variable	SA	A	UD	D	SD
1.	Short-term debt naturally accompanies higher incomes, faster growth, and greater openness to bank.					
2.	Short-term debt ensures that cash is available to satisfy the operating capital needs of a bank.					
3.	Short-term debt literally keeps a business running during times when the revenue stream temporarily is insufficient to meet operational needs.					
4.	Short-term debt provides a business with ready cash to initiate an expansion program.					
5.	Short-term debt assists a business in dealing with an emergency situation.					

Research Question 2: How does long term debt affect the profitability of Bank of Industry (BOI), Kaduna?

S/N	Variable	SA	A	UD	D	SD
6.	Long-term debt essentially leverages earnings to grow the bank.					
7.	Long-term debt leverages for owner's equity.					
8.	Long-term debt leads to no or minimal investor interference.					
9.	Long-term debt builds business credit.					
10.	Long-term debt usually has fixed interest rates that translate into consistent monthly payments and high predictability.					

Research Question 3: To what extent does equity financing affect the profitability of Bank of Industry (BOI), Kaduna?

S/N	Variable	SA	A	UD	D	SD
11.	Equity financing offers companies an alternative funding source to debt.					
12.	Equity financing provides invaluable assistance in the form of business contacts, management expertise, and access to other sources of capital.					
13.	Equity financing is committed to business and intended projects.					
14.	Equity financing helps investors have a vested interest in the business' success, growth, profitability and increase in value.					