CAPITAL STRUCTURE AND FIRMS FINANCIAL PERFORMANCE IN NIGERIA

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A PROJECT SUBMITTED TO THE DEPARTMENT OF BANKING AND FINANCE IN PARTIAL FULFILLMENT FOR THE AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN BANKING AND FINANCE, SCHOOL OF BUSINESS STUDIES, AUCHI POLYTECHNIC, AUCHI

DECEMBER, 2022

CERTIFICATION

We the undersigned hereby certify that this project titled "Capital Structure and Firms Financial Performance in Nigeria" was carried out by IBEKAEME BECKY IJEOMA with Mat No: SBS/2282070134, under our supervision in the Department of Banking and Finance, Auchi Polytechnic, Auchi, Edo State.

We therefore certify that the project is adequate both in scope and quality and is submitted to the Department of Banking and Finance in requirements of the award of Higher National Diploma (HND) in Banking and Finance.

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DEDICATION

This project work is dedicated to Almighty God, the creator for His love and protection during my educational pursuit.

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I want to specially give thanks to God Almighty for His faithfulness, love, protection and my inner strength all through these years of my studies.

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ABSTRACT

This study was carried out to investigate the impact of capital structure on the value of firms in the Nigeria Stock Exchange for the period that spanned 2010 to 2021. Thirteen (13) firms listed in the Banking sector of the Nigeria Stock Exchange were used as the sample of the study. This study used equity and leverage to measure the capital structure of the firms, while firm size and profitability (return on asset) was used as control variables. Tobin's Q was used to measure firms' value. Secondary data were sourced from the respective annual bulletin of the sampled banks and subjected to data analysis. The panel least square estimation technique was devised for the study. Empirical findings showed that equity and leverage had a significant positive relationship with firm's value. However, none of the control variables were found to have any significant relationship on firms' value during the period of study. Thus, the study concluded that there is a positive significant relationship between capital structure and firms value in the Nigeria Banking sector. Hence, among other things, the study recommended that financial and investment managers should institute sound and efficient capital structure policies in the Banking industry firms to increase their market value. Secondly, managers of Banking industry firms should ensure that the proportion of leverage to equity do not grow to unsustainable levels, to avoid the resulting diminishing effect on the value of Banking industry firms in Nigeria.

Key Words: Financial Leverage, Equity Ratio, Quoted Firms, Return on Asset, Firm Size

Word Count: 240

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

An important and crucial decision made by financial managers is the determination of the capital structure to be adopted by the firm. This is especially important as the source of finance chosen by the firm can have a significant impact on firms' performance. Firms' major source of financing involves the use of equity or debt financing or sometimes a mix of both (equity and debt). The decision as to which source of long term finance modes to be adopted is what is termed "capital structure decision". The term 'capital structure' is used to refer to the long term debt-equity mix adopted by a firm to finance business operations (Binh & Tram, 2020).

Debt Financing involves the use of long – term debt for financing business operations. The use of debt financing has some implications on firm's value. For example, the study of Modigliani and Miller (1963) showed that firms can maximize value by using debt financing since interest on debt are not tax deductible therefore serves as tax shields. The agency theory by Jensen (1986) identified another implication of debt financing. According to his study, the use of debt helps discipline managers since they are required to make fixed payments (interest expenses). This would help prevent managers from making investments in projects with low or negative net present value (NPV). However, the use of debt financing could also increase bankruptcy risk of the firm (Aziz & Abbas,

2019). Equity financing on the other hand involves the use of equity instrument to finance business operations. Equity financing involves the sales of stocks/shares to investors so as to get capital in return for business operations. Unlike debt financing, investors who purchase a firms stock becomes a co-owner of the firm (shareholder). This form of financing is more expensive than debt financing since shareholders are exposed and assumes firms risk. One advantage of this form of financing is that firms are not mandated to pay a fixed sum of money to investors unlike debt financing were a fixed interest rate is paid out.

The relationship between capital structure and firms value have been up for empirical debate. The pioneer study of Modigliani and Miller (1958) was the very first to attempt providing empirical insight to this controversy. With the assumption of no taxes, the study concluded that capital structure is irrelevant to firm's value. Thus whether a firm is levered or not, its value remains the same. Their later study (1963) showed that levered firms had more value than unlevered firms when the assumptions of tax payment were held true. The trade off theory asserts that debt financing would continue to boost firm's value up to the level where its benefits (tax shield) are higher than its costs (bankruptcy cost). Recent empirical studies have attempted to investigate the impact of capital structure on firm's value and most studies found that increasing level of debt in the structure leads to better firm's value (Dang, Bui, Dao & Nguyen, 2019; Jonny & Ayunku, 2019). However the study of Basit and Irwan (2017) has shown that while debt financing

can reduce agency problem and enjoy tax advantage, debt level over the optimum capital structure can bring a negative impact on firm value.

The proportion of debt or equity to be used for financing very much depends on the company's financial policy. However, according to Nasimi (2016) the capital structure adopted by firms is a function of the firm's size, profitability, Growth and tax liability. While firm specific characteristic have been identified to influence firms capital structure, industry specific factors such as fixed asset, technology and concentration have also been identified to influence capital structure decision (Goya, 2013; Guney & Fairchild, 2011). Thus, it becomes possible that firms under different industries could have different capital structure since they also have different financing needs. For example, Vatavu (2015) highlighted fixed assets, liquidity and taxation to be industry specific variables influencing the manufacturing industry

1.2 Statement of the Research Problem

Plethora of empirical studies have been carried out to link a firms capital structure to its value (Dada & Ghazali, 2019; Nasimi, 2019, Binh & Tram, 2020; Basit & Irwan, 2017) and these studies have found a significant relationship between capital structure and firms value. These findings reveals that it is of utmost importance that a firm determines the proper mix of debt and equity as it influences firm's market value and maximizes returns (Viviani, 2008). Studies carried out to link capital structure and firm's value has been found to be controversial and ambiguous. For example, some of these studies have found financial leverage to have no significant impact on firms value (Al- Slehat, 2020) while

some other studies have found financial leverage to have a positive significant impact on firms value (Igbal & Gujrat, 2018; Jeleel & Olayiwola, 2017). The controversy in findings could be as a result of the amount of debt used, since the use of larger amount of debt have been found to have an adverse effect on firms value because the cost of debt have out-run its benefits (Zelalem, 2020).

The study of Jeleel and Olayiwola (2017) provided some empirical insights as to the appropriate mix of finance source to be adopted by firms. In the study, companies with equity financing as measured by equity ratio were found to perform better than companies financed with debt. This finding was supported in the study of Mwende, Muturi and Njeru (2019) were equity financing was found to be a major source of finance among small and medium scale enterprises. These findings were in contrast with the earlier study of Cheng and Tzeng (2011) that found firms with higher debt level to have performed better than firms with lower debts. The difference in empirical findings can be attributed to interest payment on debt since this payment can increase financial risk and thus inhibit firm's value.

Not until recently, only few studies have been carried out to empirically compare the impact of capital structure between industries. Recent studies like that carried out by Alslehat (2020), Ishari (2016), Jeleel and Olayiwola (2017) and Igbal (2018) have investigated the impact of capital structure on specific industries and their findings have shown varying results viz a viz negative, positive and in some case no relationship. Some of these studies also found one source of financing to outperform the other and all these

give credence to industry specific attributes. However, while empirical studies carried out to investigate the impact of capital structure on firm's value on a specific industry has identified key relationships, the difference in capital structure and its corresponding impact on firm's value between industries remains unclear. However, the study of Li and Islam (2019) examined how industry specific factors affect capital structure decision although the study was limited to the Australian market. This gives room for more empirical investigations to carry out a clear comparative study between two or more industry so as to examine how the capital structure - firm's value nexus differs between industries based on industry specific factors

This study intends to fill this gap in literature by investigating the impact of capital structure on firm's value in the Banking industry. This industry is majorly chosen because of its technology, competiveness and growth rate. Their recent contribution to the total gross domestic product (GDP) is also a choice of these two industries.

1.3 Objectives of the Study

The Main objective of this study is to identify the impact of capital structure on firm's value among quoted firms in the banking industry of the Nigeria stock exchange. Other specific objectives are to.

i. Examine the effect of financial leverage on the value of firms quoted in the banking sector of the Nigeria Stock Exchange.

- ii. Determine the impact of equity ratio on the value of quoted firms in the banking sector of the Nigeria Stock Exchange.
- iii. Identify the influence of interest expense on debt on the value of quoted firms listed in the banking sector of the Nigeria Stock Exchange.

1.4 Research Questions

The main research question to be answered in this study is 'what is the relationship between capital structure and firms value in quoted firms in the Nigeria Stock Exchange?

Other specific questions are;

- i. How does financial leverage affect the value of quoted firms in the banking sector of the Nigeria Stock Exchange?
- ii. What is the effect of equity ratio on the value of quoted firms in the banking sector of the Nigeria Stock Exchange?
- iii. To what extent does interest expense on debt affect the value of quoted firms in the banking sector of the Nigeria Stock Exchange?

1.5 Hypotheses of the Study

This study would test the following hypotheses during the course of the study. The hypotheses are stated in their null form.

i. There is no significant relationship between financial leverage and value of quoted firms banking sector of the Nigeria Stock Exchange.

- ii. There is no significant relationship between equity ratio and value of firms quoted in banking sector of the Nigeria Stock Exchange.
- iii. There is no significant relationship between interest payment on debt and value of quoted firms banking sector of the Nigeria Stock Exchange.

1.6 Significance of the Study

The outcome of this study is expected to reshape the debate as to the impact of capital structure on firm's value using industry specific factors to explain probable difference in the capital-firm value nexus between industries. Other key stakeholders to benefit from this study are

Financial Managers: the outcome of this study is also expected guide firm managers in designing their capital structure so as to yield maximum returns.

Investors: Investors in the sampled industry are expected to benefit from the outcome of this study as they would better be informed of the capital structure maintained in the firms as well as its possible impact on their investments.

Researchers: it is also expected that the outcome of this study pushes the frontier of knowledge as to the impact of capital structure on firm's value. It is therefore expected that the outcome of this study becomes a building block for academic research in the field of finance.

1.7 Scope of the Study

This study focuses on comparing the impact of capital structure on firm's value across two sectors of the Nigeria economy. The capital structure-firm value nexus would be investigated in the banking industry. This sector is chosen base on their noticeable role in the economy and their contributions to total gross domestic product (GDP). In last quarter of 2020, the banking industry was found to contribute 54.39% (SEC, 2021). The population of the study is made up of all firms in the banking industry. However, the sample frame would be drawn from only firms listed in the Nigeria Stock Exchange. The choice of this sample frame owes to the availability of data since firms listed under the stock exchange are mandated to publish statements of accounts annually. The time frame of this study covers 2010 -2021.

1.8 Limitation of the Study

The limitation to this study stems from the sample size chosen for the study as only one sector was selected from among twelve (12) sectors in the economy and this could lead to sampling bias. Since the study involves the use of panel data, it is expected that the outcome can be reliable since larger number of observations is expected to produce better result.

1.9 Definition of Operational Terms

Financial Leverage

Financial leverage is the use of borrowed money (debt) to finance the purchase of assets with the expectation that the income or capital gain from the new asset will exceed the cost of borrowing.

Return on Asset

The term return on assets (ROA) refers to a financial ratio that indicates how profitable a company is in relation to its total assets. Corporate management, analysts, and investors can use ROA to determine how efficiently a company uses its assets to generate a profit.

Firm Size

It means the scale or volume of operation turned out by a single firm. The study of the size of a business is important because it significantly affects the efficiency and profitability of the firm.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the review of the body of existing literature. To enable us achieve this, a given order of review is followed which include the review of various concepts which would be followed by the review of relevant theories. Finally, previous studies related to this study were also reviewed.

2.2 Conceptual Review

This section would highlights the various concepts needed to understand this study. They include the concepts of firm value, capital structure, determinants of capital structure as well as the linkage between industry factors and capital structure.

2.2.1 Concept of Firm Value

Firm value can be defined as the measure of a company's total market value. Firm value unlike firm performance focuses on the market value of a firm (Ogbulu & Emeni, 2012). According to Lawal (2014), firm value is the net worth of a firm at a given period of time. In the event of a takeover or merger, the firm's value is what is considered and not its performance, since the former shows the current net worth of the Firm. Susanti and Restina (2018) view firm's value to be the perception of investors about firms that are often associated with stock. Hogue, Hossain and Hossain (2014) assert that firm value

and investor's confidence have a positive relationship, implying that as firm value increases investor overall confidence is increased. Emeakponuzo (2014) defined firm value to be an economic measure that reflects the value of the firm in the market. Kaplan and Norton (1996) as cited in Emeakponuzo (2014) see firm value to be the sum of all the security holders, debt holders, preferred shareholders and majority interest.

Firm's value is measured based on firm's market value (Ikponmwonsa & Eriki, 2017). Market based approach in measuring firms value is futuristic as it looks at shareholders expectations concerning future performance (Wahla, Shahsyed & Hussain, 2012; Shan & Mclver, 2011). Some of the popular market based measures that have been used in the literature to measure firm value are Tobin's Q (Ajao & Ejokehuma, 2020), market value added (Kula, 2005), market to book ratio (Al-Faroogue, Zijl, Dastan & Karim, 2007) and the natural logarithm of market capitalization (Mollah & Talukdar, 2007). In this study, the market based approach of measuring firm performance will be used. The market capitalization and Tobin's Q measures will be used to measure firm's value in this study. These measures are briefly discussed below;

2.2.2 Concept of Capital Structure

Capital structure has been defined as the proportion of debt to equity capital on the portfolio of a firm (Lawal, 2014). Capital structure decision is an important decision for financial managers as the overall cost of capital is affected as well as firm's market value. Pandey (2004) posit that capital structure influences shareholders wealth and the risk faced by shareholders. Firms having debt in the capital structure are often termed to be

levered while firms with no debt structure are termed as unlevered (Gerbach, 2013). Baker and Martin (2011) defined capital structure as the equity-debt mixture used for financing of firm's asset, operations and future growth. Alcaravci (2015) sees capital structure to be the combination of short term debt, long-term debt and equity. Abdul and Nur (2017) conceptualized capital structure as the mixture of debt and equity used to finance investment. Eriki and Osifo (2017) assert that the mix of different sources of long-term fund i.e. preference shares, equity shares, bonds, debentures are known as capital structures.

According to Sakr and Bedeir (2019) capital structure is the composition of the capital of a firm from different sources of finance e.g. debt and equity which a firm considers appropriate for improving and continuing its operations overtime. According to Uremadu (2018) capital structure of a firm includes retained earnings, debt and equity capitals. In the same line, Zelalem (2020) posited that the term capital structure is used to represent the proportionate relationship between debt and equity. Equity includes paid-up share capital, share premium and reserves and surplus (i.e. retained earnings). Capital structure is the way a company finances itself by combining long-term debt, short term debt and equity capital (Ullah, Pinglu, Zamani & Hashmi, 2020). It shows how a company finances its overall operations and growth by using different sources of funds. Capital structure of firms varies with its size, asset structure, profitability, company growth, company risk and liquidity (AL-Najjar & Taylorr, 2008).

2.3 Concept of Debt Financing

Debt financing involves sourcing of finance outside the sphere of the firm through borrowing with an obligation to pay with the principal, an agreed rate of interest (Murugesu, 2013). Debt financing gives firms opportunities to meet up with their financing needs so as to beef up returns. Debt financing increases firms risk as well as expected returns. This is in line with the risk-return trade off which relates higher risk with higher returns. Debt can be short-termed or long-termed depending on the financing need of the firm. Debts are considered long-termed if its maturity exceeds 12 months if otherwise it's known as short-term debt (Ogbulu & Emeni, 2012). Long-term debt includes bonds, debentures, preference shares, mortgages or any instrument whose maturity exceeds one year and have a fixed interest payment (Aziz & Abbas, 2019).

Debt financing is especially suitable to finance seasonal increases in working capital, acquisition of fixed assets, etc (Habib, Khan & Wazir, 2016). One notable advantage of debt financing is that it is tax deductible thus making it a cheaper source of finance as at when compared with equity financing (Adesina, Nwidobie & Adesina, 2015). Harelimana (2017) sees debt as the borrowing of funds from other firms or financial institutions with the aim of funding business operations. Dioha and Kamaluga (2017) have found that highly levered firms face difficulty in raising finance since taking higher debt increases bankruptcy risk of the firm.

2.4 Theoretical Review

Various theories of capital structure would be reviewed here. Various theories supporting and refuting the relevance of capital structure theory will be reviewed. Some of this theory to be reviewed includes the traditional theory, Capital Structure theory and Trade off theory.

2.4.1 Theory of Capital Structure Irrelevance

Modigliani-Miller (M&M) (1958) was the first to propound a theory on capital structure. According to M&M, the capital structure of firms is irrelevant to firms financing decisions. M&M were of the opinion that firm's value is a function of free cash flow discounted with related rate of return. According to the agency theory by Jensen (1986), free cash flow is used to describe the excess of required fund needed to finance project with positive net present value. The M&M theory was made under certain perfect market conditions. This condition includes the absence of bankruptcy and transaction costs, absence of risk classes, only the existence of corporate tax which is only payable to the government, the presence of information symmetry between insiders and outsiders, absence of moral hazard on the part of managers as they work for shareholders and firms issue only equity and debt.

These assumptions do not meet real life conditions and has thus led to plethora of studies hoping to ascertain determinants of capital structure which is aimed at violating the classic assumptions of the M&M theory. In real life, information asymmetry exists and

personal tax cannot be wholly discounted. It is in the light of this that M&M revisited their work in 1963 to include personal tax.

2.4.2 The Traditional Capital Structure Theory (M&M)

Modigliani and Miller (M&M) revisited their work and incorporated personal tax as a determinant of capital structure. This was as a result of the benefit of tax shield enjoyed by holding debt instrument. However, it was later found that the benefits accruing from tax shield is eroded by bankruptcy cost (Kraus & Litzenberger, 1973). Since tax shield is observable and bankruptcy cost is not, firms play safe by maintaining a safety of margin before taking advantage of the tax shield. This action taken by management leads to an equilibrium between bankruptcy cost and benefits from tax shields. Thus, firms with more cost of bankruptcy would have lesser debt in their capital structure.

The traditional capital structure theory explains why firms take great care when issuing debt despite benefits of tax shields. There are some testable implications of this model like firms with high risk, firms with abnormally valorous growth opportunities and firms with intangible assets will issue less debt as these have high bankruptcy cost. Firms that have tangible assets with secondary value are likely to issue more debt. Also, firms enjoying tax advantage may also issue out debt. The study of Mackie-Mason revealed that firms paying taxes would prefer issuing debts.

2.4.3 Trade-off Theory

The trade of theory was first discussed by Kraus and Litzenberger (1973) to explain capital structure of firms. The trade-off theory posits that firms should have an optimal capital structure based on the trade-off between cost and benefits of using debts. The relaxation of the M&M theory of tax reflected the real world situation were firms are expected to pay taxes. However, the tax deductibility of interest payment on debt makes the use of debt financing attractive (Graham, 2003).

According to Myers (1984), firms should move to attain its desired or optimal capital structure which could mean the increase or decrease of debt. The trade-off theory (TOT) defines an optimal capital structure is at that point were the benefit of debt offsets its cost. One major cost of debt is bankruptcy cost. Therefore, the benefits of using debt (tax shield) should offset the cost. Interest payment on debts have a negative influence on firms value (Myers, 1984) as future cash flows, liquidity are affected by the regular payments of interest.

2.5 Empirical Review

Various studies that have been conducted to investigate the impact of capital structure of firm's value and performance. One of such study is the study of Mackay and Phillips (2005) that examined the importance of industry to firm-level financial and real decisions for the period spanning 1981-2000. The study employed the multiple regression analytical technique to capture the relationship between variables. Findings revealed that

in addition to standard industry fixed effects, financial structure also depends on a firm's position within its industry. In competitive industries, a firm's financial leverage depends on its natural hedge (its proximity to the median industry capital—labor ratio), the actions of other firms in the industry, and its status as entrant, incumbent, or exiting firm. Financial leverage is higher and less dispersed in concentrated industries, where strategic debt interactions are also stronger, but a firm's natural hedge is not significant.

Chowdhury and Chowdhury (2010) investigated the impact of debt-equity structure on share values of firms listed in the Dhaka Stock Exchange for the period 1999-2003. The study employed the use of correlation and regression analysis to capture the relationships between variables. Result findings indicated a strong positive relationship between share value and debt-equity structure among firms in the exchange.

Onwumere, Ibe and Okpara (2011) investigated the impact of debt financing on firms value among Nigeria firms for the period spanning 2004-2008. The study employed the use of bankruptcy model and the Multiple Discriminant Analysis (MDA) was used to classify firms that have high firm value or not. Result indicated that 20 firms enhanced their value by using debt financing. However, eight firms were found to have lower firm value since they used less of debt financing. Thus the study concluded that debt financing is germane in enhancing firms' value.

Degryse, Goeij and Kappert (2012) investigated the impact of firm and industry characteristics on small firms' capital structure in Dutch for the period 2003-2005. Result indicated that Dutch SMEs use profits to reduce their debt level, and growing

firms increase their debt position since they need more funds. Result also indicated that inter- and intra- industry effects are important in explaining small firms' capital structure. Industries exhibit different average debt levels, which is in line with the trade-off theory. Ogbulu and Emeni (2012) investigated the impact of capital structure on firm's value in the Nigeria context for the period 2007. The ordinary least square method was used to carry out analysis and result indicated that equity capital was not significant in explaining firm's value. On the contrary, long term debt was found to be key in explaining changes in firm value during the period of study.

Akhtar, Khan, Shadid and Ahmad (2016) examined the impact of debt on firms value in Pakistan for the period spanning 2011-2015. The study employed the use of OLS for data analysis and result indicated that a positive relationship exist between debt (leverage) and firms value. The study of Aggarwal and Padhan (2017) examined the impact of capital structure on firm's value of selected Indian firms for the period spanning 2001-2015. The study employed the use of fixed effect and random effect models under the ordinary least square framework. Result findings indicated that leverage, liquidity, size and economic growth had a significant relationship with firm's value.

Ha and Tai (2017) explored the impact of capital structure and cash holdings on firms value among listed firms in the Ho Chi Minh Stock Exchange in Vietnam for the period 2009-2014. The study employed the use of generalized least square for data analysis and result indicated that short term debt had a significant negative relationship with firm value while long term debt was found to be insignificant in explaining firm's value.

Cash holding on the other hand was found to have a positive significant relationship with firm's value.

Uzliawati, Yuliana, Januarsi and Santoso (2018) explored the influence of capital structure on firm value of firms quoted in the manufacturing industry in Indonesian Stock Exchange. The study period was 2012-2015 and the multiple regressions were used to capture the relationship between study variables. Result indicated that debt-equity ratio and long term debt – asset ratio had a positive relationship with firm value. However, a negative relationship was found to exist between long term debt to equity ratio and firm value. While debt to asset ratio had no significance on firms value. Ogbonna and Ejem (2019) employed a dynamic framework to examine the relationship between capital structure and firms value using panel data spanning 2010-2017. The study used a panel generalized method of moments (GMM) to estimate the dynamic relationship between study variables. The study outcome revealed that both equity and debt capital instruments at first difference impact positively and significantly on firms value.

Almahadin and Oround (2019) explored the relationship between capital structure and firm value as well as ascertaining the moderating role of profitability. The study was conducted in the Jordanian Stock exchange for the period 2013-2017. The study employed the use of fixed effect model under the OLS framework. Result findings indicated that debt ratio had a significant negative relationship with debt ratio. The interaction between profitability and debt ratio was also found to significantly influence firm's value.

Igbinovia and Ogbeide (2019) examined the relationship between capital structure and firms value of selected manufacturing companies in Nigeria for the period spanning 2012-2017. The study employed the use of descriptive statistics, correlation analysis and the panel least square to ascertain background characteristics of the data as well as capture the relationship between variables. Result indicated that tangibility of asset, profitability and age of a firm have significant relationship with firm value. However, the size of a firm has a negative and insignificant relationship with firm value of selected quoted manufacturing firms in Nigeria.

Okeke and Okeke (2019) investigated the impact of capital structure on firm's value among quoted firms in Nigeria Stock Exchange for the period 2001-2015. The study examined the role of equity capital and long-term debt on firms value (Tobin's Q) using the ordinarily least square technique. Result indicated that long term debt had a significant negative relationship with firm's value while equity capital showed no significance in explaining firm's value although the relationship was found to be positive.

Nguyen, Nguyen, Nguyen, Thanh and Le (2020) examined the impact of capital structure on firms' value for firms listed in the food and beverage industry in Vietnam for the period 2014-2018. The study employed the use of multiple regressions to capture the relationship between variables. The findings indicated that capital structure has a positive significant relationship with firm value during the period of study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter introduces us to the methods employed for this study. This chapter covers the research design, population and sample, models and estimation techniques, theoretical framework and sampling techniques used for the study.

3.2 Research Design

This study would use the causal research design. The causal research design aims to ascertain the relationship between two variables. Since our study intends to ascertain the relationship between two variables, this design therefore suits the purpose of this study. Longitudinal research design would also be adopted by this study. This study would use historic time series data of capital structure variables and other variables for a period of 12years (2010-2021). This design is appropriate for this study as it involves repeated observations of the same variables (i.e. firms) over short or long periods of time.

3.3 Population and Sample of the Study

The listed firms in the banking sector makes up the population of this study. This sector is chosen because of its high technology growth and competitiveness. Fourteen (14) banks are listed under the financial sector. However, Thirteen (13) firms listed under banking sector are drawn as sample. To create a balance panel observation, the stratified random sampling technique will be used to stratify the banks into different generations

(old & new) while six (6) new generation and seven (7) old generation will be drawn from each strata making up a total of eleven (13) banks drawn as the sample.

3.4 Source of Data

Secondary data spanning 2010-2021 is sourced from the annual bulletin of the sampled firms. Certain variables not gotten directly from sampled firm's financial statements are computed. Variables of interest include leverage, equity ratio and interest on debt.

3.5 Model Specifications

To capture the relationship between capital structure and firm's value, this study adapts the model of Ogbolu and Emeni (2012) which modeled firm's value to be a function of debt and equity. Their model is expressed below;

$$FV = f(DBT, EQT)$$
 (1)

Where

FV = Firm value

DBT = Total Debt to total asset ratio

EQT = Equity to total asset ratio

Our study adapts and modifies the Eq 1 to give Eq 2

$$Tobin's Q = f(LEV, EQTY, INEXP, FS, PROF)$$
(2)

$$LnMCAP = f(LEV, EQTY, INEXP, FS, PROF)$$
(3)

Where

Tobin's Q = Measure of firm value

LnMCAP = logarithm of market capitalization

Lev = Financial leverage

EQTY = Equity ratio

INEXP = Interest expense on debt

FS = Firm Size (control variable)

PROF = Profitability (control variable)

Equation 2 and 3 cannot be estimated so we re-specify the equation econometrically and we have;

Tobin's Q_{itab}

$$= \alpha_{0ab} + \beta_1 LEV_{itab} + \beta_2 EQTY_{itab} + \beta_3 INEXP_{itab} + \beta_4 FS_{itab} + \beta_4 PROF_{itab} + \varepsilon_{itab}$$

$$(4)$$

Where;

 $\alpha_0 = Intercept$

 $\beta_1 - \beta_4 = Beta \ Coeff cients \ to \ be \ estimated \ without \ industry \ factors$

 $\varepsilon_{it} = Error term$

i,t = cross sections and time (2010-2021)

Premise on the trade-off theory and other empirical studies reviewed apriori expectation for this study is mathematically expressed below;

$$\beta_1 - \beta_3 \leq 0, \beta_4 > 0, \theta_1 - \theta_3 \leq 0, \theta_4 > 0, \theta_5 \text{ and } \theta_6 \leq 0.$$

3.6 Data Analysis Technique

Prior to estimation of the specified models, various statistical tests would be applied to our study variables to ensure they are fit for analysis. Such tests include descriptive statistics and correlation tests.

The panel least square is used to capture the relationship between capital structure and firm value. This technique is suitable for our study as it is able to avoid multicollinearity problems which are peculiar to time series analysis. The Hausman test would be used to test for appropriate models that best suit our study i.e. random model versus fixed effect models.

3.7 Measurements of Variables

Variable	Abbreviation	Measurement	Reference
Tobin's Q	TQ	Total market value of Firm	Ajao &
		Total Asset value of Firm	Ejokehuma
		,	(2020)
Leverage	LEV	Long — Term Debt	Nasim (2016)
		Total Asset	
Equity	EQTY	Shareholders Fund	Jeleel&Olayiwola
Ratio		Total Asset	(2017)
Interest	INEXP	Total interest expense on debt	Lawal (2014)
Expense			
Firm Size	FS	Log of Total Asset	Dada & Ghazali
			(2016)
Profitability	PROF	Earnings after Interest and Tax	Abel (2017)
		[/] Total Asset	

Source: Authors Compilation (2022)

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS OF RESULT

4.1 Introduction

In this chapter, we perform the statistical analysis that forms the basis for the empirical evaluation of the study. Various models specified in the previous chapter are estimated and interpreted. This chapter begins by first carrying out preliminary tests to check for the series properties and characteristics of the data set. This is followed by conducting empirical test to investigate the impact of capital structure on firm's value in the banking and oil/gas sector.

4.2 Data Presentation

Data spanning 12years (2009- 2021) were sourced from the audited annual reports of the sampled firms. The data set used for the study is presented in the appendix.

4.3. Data Analysis

4.3.1 Descriptive Statistics

Summary statistics is an important procedure to be carried out before any formal estimation can be made. This study would need to test for the normality of data set to use for the study. The descriptive statistics are employed to determine if the data set forms a normal distribution curve. The standard deviations and the Jarque Bera give a quick overview of the normality of data set.

Table 4.1 Descriptive Statistics

Banking Sector						
Variables	Mean	Std.Dev	Skewness	Kurtosis	P.value	
MCAP	17.68	0.79	-0.12	2.64	0.56	
TQ	1.15	0.78	-0.12	2.64	0.56	
ROA	0.01	0.02	-1.09	12.10	0.00	
LEV	1.02	0.74	6.91	58.51	0.00	
INTEXP	64,045,313	51,466,211	1.58	5.38	0.00	
FS	21.15	0.99	-0.13	2.23	0.13	
EQTY	0.10	0.20	-5.99	41.28	0.00	

The descriptive statistics of the variables is presented in Table 4.1. The Banking sector recorded a mean of 17.68 which implies that the value of the Banking sector is high during the period of study. However, the Banking sector, recorded 1.15 on the average thus indicating that on the average, the firm's market value is more than the firms stated value. Firms in the banking sector recorded a mean of (0.01). The standard deviation showed that profitability in the Banking sector is evenly spread as indicated by the low standard deviation recorded (0.01). Firms in the Banking sector are observed to be highly leveraged. The standard deviation is found to be minimal for firms in both sectors. As expected, the interest expense is observed to be high for firms in the Banking sector

The mean value of equity is 0.10 for banking industry while the standard deviation is low for firms in the Banking industry. In terms of size, firms in the Banking industry are observed to be quite large.

On normality, findings show that for the banking industry dataset, MCAP, TQ, ROA, COMP, FS and EQTY are negatively skewed. On the contrary, LEV, INTEXP and TECH are positively skewed in the Banking Industry.

Table 4.2 Regression Summary (TQ equation)

Variable	Banking Sector (Fixed Effect)					
	Coefficient	t-stat	Prob.			
ROA	-0.28	-0.48	0.62			
INTEXP	-0.00	-0.20	0.84			
FSIZE	-0.06	-1.76	0.08			
EQTY	0.37	5.86	0.00**			
LEV	1.01	65.9	0.00**			
С	1.67	3.80	0.00**			
R.sq	0.97					
Adj. R.sq	0.97					
F-stat	353					
D.Watson	2.2					

Source: Authors computation (2022). Note that * and ** signifies statistical significance at the 5% and 1% level respectively

Diagnostic Test Result

The relationship between capital structure and firms value in the Banking industry is presented in the Table 4.2. On diagnostics, findings show that the coefficient of determination is 0.97. This implies that 97 of variations in the dependent variable are accounted for by the independent variables. The F-Stat tests the joint significance of the model and indicates whether the relationship between the dependent and independent variables is linear. Findings show that the F-Stat are significant at the 1% level thus suggesting that the models are significant overall and that there is a linear relationship

between the variables. The D.Watson shows the absence of autocorrelation in our models as the D.Watson value lies between 1.9 to 2.4.

Return on Asset and Firms Value

Findings from the table shows that the coefficient of ROA (-0.28) is negative which indicates an inverse relationship between ROA and firms value. The implication of this is that a unit change in ROA will lead to a -0.28 change in firm's value by the magnitude of its coefficient. The relationship between ROA and firms value is observed to be insignificant at the 5% level. Hence, this indicates that ROA is not a strong determinant of firm's value.

Interest Expense and Firms Value

The relationship between interest expense and firms value is observed to be negative (-0.00). The co-efficient is seen to be minute which suggests that the impact of interest expense on the firms' value of banks is really weak. Going forward, we also see that the relationship is not significant at the 1% or 5% level. The sign of the coefficient suggests that a unit movement in interest expense will cause an innovation in firm's value by the magnitude of its coefficient.

Equity and Firms Value

The relationship between equity and firms value is observed to be positive (0.37). This suggests that equity is a key factor in determining firm's value. By implication, unit

change equity will cause a 0.37 change in the value of the firm. The relationship is also found to be significant at the 1% level of significance.

4.3 Hypotheses Testing

In this section, the working hypotheses of the study are tested based on the outcome of the results from the estimated models of the study. The hypotheses are tested using the coefficients estimated in the specified equations for Tables 4.2 focusing on the significance of the relevant coefficients.

Hypothesis One

Null Hypothesis: There is no significant relationship between financial leverage and value of quoted firms in banking sector of the Nigeria stock exchange.

Table 4.3

Dependent Variable	Banking Industry	Decision
	Co-eff	
TQ	1.01	reject
	(0.00)	

Source: Authors computation

The coefficient of leverage is found to be significant at the 1% level in the TQ equation. Therefore, this study rejects the null hypothesis for firms in the Banking industry (BI). Empirical findings thus confirm that there is a significant relationship between financial leverage and firms value (TQ) for firms listed in the Banking industry.

Hypothesis Two

Null Hypothesis: There is no significant relationship between equity ratio and value of firms quoted in oil/gas and banking sector of the Nigeria stock exchange

Table 4.4

Dependent Variable	Banking Industry	Decision
	Co-eff	
TQ	0.37	reject
	(0.00)	-

Source: Authors computation

Equity ratio is statistically significant in the TQ equation for firms in the Banking industry. However, it is found that equity ratio is only significant with MCAP in the Banking industry. Therefore, the null hypothesis is rejected for banking industry for the TQ equation. Therefore, empirical findings confirm that there is a significant relationship between equity ratio and TQ for listed firms in the Banking industry.

Hypothesis Three

Null Hypothesis: There is no significant relationship between interest payment on debt and value of quoted firms in banking sector of the Nigeria stock exchange.

Table 4.5

Dependent Variable	Banking Industry	Decision
	Co-eff	
TQ	0.02	Accept
	(0.54)	

Source: Authors computation from table 4.5

Interest payment of firms listed in the Banking industries has no significant relationship with TQ. Hence, the null hypothesis cannot be rejected and we thus accept that there is no significant relationship between interest payment on debt and TQ for firms listed in the Banking industry.

4.4 Discussion of Findings and Policy Implication

This study was conducted to examine the impact of capital structure on firm's value in the Banking industry in Nigeria. Findings from the study has been rich and robust and fit for policy recommendations. Various models were specified and estimated to examine the impact of capital structure on firm's value. Precisely, findings show that leverage had a significant positive relationship with TQ in the Banking industry (BI) firms. The implication of this is that higher leverage will increase firms value (TQ). This finding negates the submission of Mackay and Phillips (2005).

Equity ratio was found to have a significant positive relationship with firms value (TQ) for firms in the banking industry. This finding follows the submission of Hoque, Hossain and Hossain (2014) that found a significant relationship between debt-equity ratio and firm's value. But our findings contrast the findings of Asif and Aziz (2016) whose study found an insignificant relationship between equity-debt ratio and firm's value. In the Banking industry, return on asset was found to have a positive relationship with firm value (TQ. In the Banking industry, firm size was observed to have a negative relationship with TQ.

Interest payment on debt was observed to have no significant relationship with firms value (TQ). This implies that higher interest payment causes a decline in firm's value. However, none of the relationships were significant. This finding follows the submission of Akhtar, et al (2016) and Aggarwal and Padhan (2017) whose studies confirmed a significant relationship between interest's payments and firm value.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the summary of findings from the empirical analysis as well as the conclusion. The policy recommendations necessitated by these findings are subsequently presented.

5.2 Summary of Findings

This study empirically investigated the linkage between capital structure and firms value in the Nigeria stock exchange for the period that spanned 2010-2021. The study employed the use of market value indicators namely Tobin's Q (TQ).

Specifically, the empirical result revealed that the leverage of firms in the Banking industry (BI) has a positive significant relationship with TQ. Secondly, findings revealed that Equity ratio had a significant positive relationship with TQ. Thirdly, interest payment on debt was found to have a significant positive relationship with firms in the banking industry. Fourthly, firm size had an insignificant relationship with TQ for sampled banking firms. Lastly, Return on asset (profitability) had no significant relationship with TQ for firms in the banking industry

5.3 Conclusion

Capital structure decision affects the mix of debt and equity that a firm uses to finance its business operations. As a result, capital structure decisions have important financial implications for any firm. This decision is important because the firm need to maximize return to its shareholders, as well as determine the value of the firm in order to avoid the much talked about agency problems. Apart from the competitive environment, capital structure decisions have long- term implications on the prospect of the firms. The impact of capital structure on firm's value comes to the fore when view against the backdrop that managers must determine the appropriate and optimum capital mix that will maximize the value of the firm, as well as satisfy the shareholder's yearning. Since the capital structure of a firm is a mix of debt and equity that is used by a firm to enhance its operation, the firm's specific strategy should deal with the appropriate mix of debt and equity to finance the firm's assets.

This study concludes that capital structure has a strong impact on firm's value although the direction of relationship is dependent on the indicator of firm value employed.

5.4 Recommendations

Base on the empirical findings of this study, the following policy recommendations are suggested for policy action:

(i) Financial and investment managers should institute sound and efficient capital structure policies in the Banking industry firms to increase their market value.

- (ii) Managers of Banking industry firms should ensure that the proportion of leverage to equity do not grow to unsustainable levels, to avoid the resulting diminishing effect on the value of Banking industry firms in Nigeria.
- (iii) Efficient and unwieldy tax policies like tax deductibility from debt which will increase firm performance and overall value, particularly with respect to corporate income tax deduction should be developed in order to increase firm's value of firms in the Banking industry.

5.5 Contribution to Knowledge

This study has made the following contributions to knowledge;

- 1. This study has provided empirical insight as to the relationship between capital structure and firms value banking industry firms.
- 2. This study also took a departure from previous studies by examining firm's capital structure in the light of firms in the banking industry. This is expected to explain the reasons for the difference in capital structure if any.

5.6 Suggestion for Further Studies

 Further research studies can include internal variables like as asset tangibility, age and growth opportunities of firms, as well as more macroeconomic variables such as inflation and exchange rates as possible determinants of firm's capital structure.

- ii. Future studies can as well include firms from other industries to reexamine the relationship between capital structure and firms value.
- iii. Future line of research should employ other econometric techniques such as the Pool Mean Group Estimator (PMG), Panel Vector Error Correction Model (PVECM) and the GMM estimation techniques to make the findings robust.

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Appendix I

Banking Industries

Descriptive Statistics

						INDUST			CAPITA
		TODING		LEVED		RYCON		COLUTY	L_LAB
			DOA						
	MCAP		ROA 0.01603						
Mean	3	3			3			0.10162	3
Mean	_	_	0.01333					1 0 12175	_
Median	3	7	0.01333	6	1	0.57000	4	8	40.0300
Maximu	_	•	_			_		_	4 196 559
	19.3747	0.11299	4	7.99249 5	2.00L+0 8	0.59000	7	4	3
m	15 7632	0.40122	-			Ü	•	•	3
Minimum			0.095318					- 1.547496	- 27 02318
Willilliulli			0.093318						
Std. Dev.		9	6			5		1	29.0404
Sid. Dev.	=	-	-	_		_	_	1	1.85918
Skewness								- 5 000692	
Skewness			12.1099						
IZ									
Kurtosis	2	5	9	1	1	7	0	2	1
Jarque-	1 14798	14429 6	522 943	19500 0	93 9931	9 29881	3 93973	9586 44	256 117
Bera	4		1		8		2	0	7
Probabilit		_		_				-	•
У	2	0.00000	0.00000	0	0.00000	7	6	0.00000	0.00000
J	2	O	O	O	Ü	,	O	O	O
	2528.31	165.851	2.29362	146.586	9.16E+0	81.3410	3024.83	14.5604	6683.61
Sum	6	8	7	5	9	0	5	0	0
Sum Sq.	88.6837	86.4811	0.06367	79.5635	3.76E+1	0.02706	140.354	6.09930	119755.
Dev.	9	3	8	5	7	1	8	5	0
Observati									
ons	143	143	143	143	143	143	143	143	143

Appendix II

Banking Industry Dataset (2010-2021)

								CO		
Companies	Year	TQ	LEV	EQTY	ROA	FSIZE	TECH	MP	MCAP	LMCAP
Access Bank	2010	0.99	0.78	0.20	0.01	20.51	43.88	0.56	16.89	7.33
Access Bank	2011	0.93	0.88	0.12	0.01	21.21	49.51	0.54	17.41	7.56
Access Bank	2012	0.95	0.86	0.14	0.02	21.28	41.22	0.57	17.99	7.81
Access Bank	2013	0.99	0.87	0.13	0.02	21.33	43.84	0.55	18.04	7.83
Access Bank	2014	0.94	0.87	0.13	0.02	21.47	53.40	0.57	18.16	7.89
Access Bank	2015	0.91	0.86	0.14	0.03	21.68	49.66	0.59	18.44	8.01
Access Bank	2016	0.92	0.87	0.13	0.02	21.97	58.99	0.57	18.50	8.03
Access Bank	2017	0.95	0.88	0.12	0.01	22.13	64.50	0.58	18.87	8.19
Access Bank	2018	0.94	0.90	0.10	0.02	22.32	73.31	0.58	19.15	8.32
Access Bank	2019	0.96	0.91	0.09	0.01	22.69	83.46	0.57	19.37	8.41
Access Bank	2020	0.95	0.91	0.09	0.01	22.88	108.73	0.58	19.24	8.35
Access Bank	2021	0.96	0.91	0.09	0.01	22.69	83.46	0.57	19.37	8.41
Eco Bank	2010	5.12	4.79	0.18	0.05	19.93	-27.02	0.56	16.53	7.18
Eco Bank	2011	3.28	3.10	0.07	0.02	20.82	-4.42	0.54	16.88	7.33
Eco Bank	2012	1.02	0.98	0.03	0.02	22.33	81.72	0.57	17.62	7.65
Eco Bank	2013	0.95	0.90	0.03	0.01	22.45	102.88	0.55	17.61	7.65
Eco Bank	2014	0.95	0.89	0.03	0.01	22.53	104.52	0.57	17.79	7.73
Eco Bank	2015	0.96	0.89	0.15	0.01	22.50	98.37	0.59	18.00	7.82
Eco Bank	2016	0.95	0.91	0.10	-0.01	22.56	124.64	0.57	18.00	7.82
Eco Bank	2017	0.95	0.90	0.10	0.01	22.65	142.03	0.58	18.12	7.87
Eco Bank	2018	0.96	0.92	0.08	0.01	22.83	186.56	0.58	18.26	7.93
Eco Bank	2019	0.94	0.92	0.08	0.01	22.88	39.15	0.57	19.29	8.38
Eco Bank	2020	0.93	0.92	0.08	0.00	23.06	49.86	0.58	19.03	8.27
Eco Bank	2021	0.95	0.90	0.10	0.01	22.65	142.03	0.58	18.12	7.87
Fidelity	2010	0.00	0.70	0.25	0.04	10.00	20.40	0 -	4 - 40	= 10
Bank Fidelity	2010	0.88	0.72	0.27	0.01	19.99	30.49	0.56	16.42	7.13
Bank	2011	0.86	0.80	0.20	0.00	20.42	34.00	0.54	16.76	7.28
Fidelity	2011	0.00	0.00	0.20	0.00	20.12	21100	0.21	10.70	7.20
Bank	2012	0.90	0.82	0.18	0.00	20.63	30.87	0.57	17.56	7.63
Fidelity										
Bank	2013	0.92	0.85	0.15	0.01	20.80	30.92	0.55	17.83	7.74
Fidelity Bank	2014	0.89	0.85	0.15	0.01	20.89	33.24	0.57	17.83	7.74
Fidelity	2017	0.07	0.03	0.13	0.01	20.07	33.24	0.57	17.03	7.74
Bank	2015	0.89	0.85	0.15	0.01	20.93	35.63	0.59	17.91	7.78
Fidelity							_			_
Bank	2016	0.88	0.86	0.14	0.00	20.98	38.26	0.57	17.93	7.79

Fidelity										
Bank	2017	0.90	0.85	0.15	0.01	21.04	43.09	0.58	18.19	7.90
Fidelity										
Bank	2018	0.92	0.89	0.11	0.01	21.27	51.16	0.58	18.25	7.92
Fidelity										
Bank	2019	0.92	0.89	0.11	0.01	21.47	68.82	0.57	18.44	8.01
Fidelity										
Bank	2020	0.93	0.90	0.10	0.01	21.74	74.49	0.58	18.10	7.86
Fidelity	2021	0.02	0.80	0.11	0.01	21.47	60.02	0.57	10 44	0.01
Bank First Bank	2021	0.92	0.89	0.11	0.01	21.47	68.82	0.57	18.44	8.01
Holding	2010	1.07	0.85	0.15	0.01	21.56	22.58	0.56	17.80	7.73
First Bank	2010	1107	0.00	0.12	0.01	21.00		3.2 3	17,00	7176
Holding	2011	0.97	0.87	0.13	0.01	21.77	30.61	0.54	17.36	7.54
First Bank										
Holding	2012	1.02	0.86	0.12	0.02	21.88	21.97	0.57	17.88	7.77
First Bank										
Holding	2013	1.01	0.87	0.10	0.02	22.08	43.24	0.55	18.35	7.97
First Bank	2014	0.01	0.04	0.11	0.02	22.10	39.87	0.57	10.50	9.07
Holding First Bank	2014	0.91	0.84	0.11	0.02	22.19	39.87	0.57	18.59	8.07
Holding	2015	0.49	0.45	0.14	0.00	22.15	38.28	0.59	18.68	8.11
First Bank	2013	0.17	0.15	0.11	0.00	22.13	30.20	0.57	10.00	0.11
Holding	2016	0.90	0.88	0.12	0.00	22.28	42.98	0.57	18.43	8.00
First Bank										
Holding	2017	0.92	0.87	0.13	0.01	22.38	44.96	0.58	18.74	8.14
First Bank										
Holding	2018	0.96	0.91	0.10	0.01	22.44	43.39	0.58	18.83	8.18
First Bank Holding	2019	0.93	0.89	0.11	0.01	22.55	45.38	0.57	18.84	8.18
First Bank	2019	0.93	0.69	0.11	0.01	22.33	43.30	0.57	10.04	0.10
Holding	2020	0.93	0.90	0.10	0.01	22.76	50.11	0.58	18.71	8.12
First Bank										
Holding	2021	0.93	0.89	0.11	0.01	22.55	45.38	0.57	18.84	8.18
First City										
Monument						• • • •				
Bank	2010	0.98	0.75	0.25	0.01	20.10	37.53	0.56	16.89	7.34
First City Monument										
Bank	2011	0.90	0.80	0.20	-0.01	20.22	41.49	0.54	17.06	7.41
First City	2011	0.70	0.00	0.20	0.01	20.22	11.12	0.51	17.00	7.11
Monument										
Bank	2012	0.93	0.85	0.15	0.02	20.63	39.21	0.57	17.59	7.64
First City										
Monument	2012	0.02	0.05	0.14	0.02	20.72	20.42	0.55	15.60	5
Bank First City	2013	0.93	0.86	0.14	0.02	20.73	30.43	0.55	17.63	7.66
First City Monument										
Bank	2014	0.91	0.86	0.14	0.02	20.88	30.29	0.57	17.63	7.66
First City	2014	0.91	0.86	0.14	0.02	20.88	24.07	0.57	17.03	
riest City	2015	0.89	0.80	0.14	0.00	20.87	24.07	0.59	17.90	7.78

				1		1			1	
Monument										
Bank First City										
First City Monument										
Bank	2016	0.87	0.85	0.15	0.01	20.88	37.30	0.57	17.83	7.74
First City	2010	0.67	0.83	0.13	0.01	20.00	37.30	0.57	17.63	7.74
Monument										
Bank	2017	0.87	0.84	0.16	0.01	20.89	41.51	0.58	17.94	7.79
First City	2017	0.07	0.04	0.10	0.01	20.07	41.51	0.56	17.74	1.17
Monument										
Bank	2018	0.90	0.87	0.13	0.01	21.08	43.19	0.58	17.89	7.77
First City	2010	0.70	0.07	0.13	0.01	21.00	13.17	0.50	17.07	7.77
Monument										
Bank	2019	0.77	0.75	0.12	0.01	21.24	48.81	0.57	17.93	7.79
First City										
Monument										
Bank	2020	0.92	0.89	0.11	0.01	21.45	62.24	0.58	17.91	7.78
First City										
Monument										
Bank	2021	0.92	0.89	0.11	0.01	21.45	62.24	0.58	17.91	7.78
Guaranty										
Trust Bank	2010	1.18	0.82	0.19	0.03	20.86	41.61	0.56	17.22	7.48
Guaranty										
Trust Bank	2011	1.11	0.85	0.14	0.03	21.20	47.84	0.54	17.15	7.45
Guaranty	2012	1.00	0.04	0.16	0.05	21.27	45.71	0.57	17.40	7.60
Trust Bank	2012	1.23	0.84	0.16	0.05	21.27	45.71	0.57	17.49	7.60
Guaranty	2012	1 22	0.04	0.16	0.02	21.47	162.01	0.55	16.07	7 27
Trust Bank	2013	1.22	0.84	0.16	0.03	21.47	162.01	0.55	16.97	7.37
Guaranty Trust Bank	2014	1.12	0.80	0.15	0.04	21.58	126.21	0.57	17.15	7.45
Guaranty	2014	1.12	0.80	0.13	0.04	21.36	120.21	0.57	17.13	7.43
Trust Bank	2015	1.05	0.84	0.16	0.04	21.65	80.63	0.59	18.05	7.84
Guaranty	2015	1.05	0.01	0.10	0.01	21.00	00.05	0.07	10.02	7.01
Trust Bank	2016	1.07	0.84	0.16	0.04	21.86	89.92	0.57	18.02	7.83
Guaranty										
Trust Bank	2017	1.17	0.82	0.18	0.05	21.93	81.78	0.58	18.21	7.91
Guaranty										
Trust Bank	2018	1.13	0.82	0.18	0.06	21.91	70.52	0.58	18.25	7.93
Guaranty										
Trust Bank	2019	1.05	0.82	0.18	0.05	22.05	82.22	0.57	17.99	7.81
Guaranty										
Trust Bank	2020	1.03	0.84	0.16	0.04	22.32	109.86	0.58	17.67	7.67
Guaranty	2021	1.05	0.02	0.10	0.05	22.05	02.22	0.57	17.00	7.01
Trust Bank	2021	1.05	0.82	0.18	0.05	22.05	82.22	0.57	17.99	7.81
StanbicIbtc	2010	1 22	0.78	0.23	0.02	10.77	20.20	0.54	15 90	6.90
Holding StanbicIbtc	2010	1.23	0.78	0.23	0.02	19.77	20.38	0.56	15.89	0.90
Holding	2011	1.34	0.85	0.15	0.01	20.13	25.65	0.54	15.87	6.89
StanbicIbtc	2011	1.34	0.65	0.13	0.01	20.13	43.03	0.54	13.07	0.09
Holding	2012	1.18	0.87	0.13	0.02	20.33	22.82	0.57	17.00	7.38
Holumg	2012	1.10	0.07	0.13	0.02	20.33	22.02	0.57	17.00	1.38

StanbicIbtc										
Holding	2013	1.32	1.00	0.15	0.03	20.32	21.15	0.55	17.06	7.41
StanbicIbtc										
Holding	2014	1.16	0.88	0.13	0.04	20.67	27.35	0.57	17.05	7.41
StanbicIbtc	2015	0.04	0.66	0.14	0.02	20.66	27.72	0.50	17.47	7.50
Holding StanbicIbtc	2015	0.84	0.66	0.14	0.02	20.66	27.72	0.59	17.47	7.59
Holding	2016	1.01	0.87	0.13	0.03	20.78	24.37	0.57	17.20	7.47
StanbicIbtc	2010	1.01	0.07	0.13	0.03	20.70	24.37	0.57	17.20	7.77
Holding	2017	1.17	0.87	0.13	0.03	21.05	22.98	0.58	17.49	7.59
StanbicIbtc										
Holding	2018	1.15	0.86	0.14	0.04	21.23	26.11	0.58	17.51	7.60
StanbicIbtc	2010	4.05	0.04	0.4.5	0.04	24.27	20.02	0.77	15.55	0
Holding	2019	1.07	0.84	0.16	0.04	21.35	28.83	0.57	17.57	7.63
StanbicIbtc Holding	2020	0.95	0.75	0.13	0.03	21.63	40.09	0.58	17.27	7.50
StanbicIbte	2020	0.93	0.73	0.13	0.03	21.03	40.03	0.56	17.27	7.50
Holding	2021	1.32	1.00	0.15	0.03	20.32	21.15	0.55	17.06	7.41
Sterling										
Bank	2010	1.04	0.89	0.18	0.02	19.27	46.68	0.56	16.12	7.00
Sterling	2011	0.05	0.02	0.00	0.01	20.04	62.00	0.54	1	7.10
Bank Sterling	2011	0.95	0.92	0.08	0.01	20.04	63.09	0.54	16.56	7.19
Bank	2012	0.97	0.92	0.08	0.01	20.18	51.39	0.57	17.20	7.47
Sterling	2012	0.77	0.72	0.00	0.01	20.10	31.37	0.57	17.20	7.77
Bank	2013	1.08	1.00	0.10	0.01	20.28	44.98	0.55	17.35	7.53
Sterling										
Bank	2014	0.99	0.90	0.10	0.01	20.53	48.41	0.57	17.37	7.54
Sterling	2015	1.00	1.02	0.12	0.01	20.50	52.25	0.50	17.57	7.62
Bank Sterling	2015	1.09	1.03	0.12	0.01	20.50	53.35	0.59	17.57	7.63
Bank	2016	0.92	0.90	0.10	0.01	20.54	60.32	0.57	17.58	7.63
Sterling		4.7	017 0	0,10						
Bank	2017	0.93	0.91	0.09	0.01	20.79	77.83	0.58	17.91	7.78
Sterling										
Bank	2018	0.96	0.91	0.09	0.01	20.82	71.38	0.58	18.06	7.84
Sterling Bank	2019	0.95	0.90	0.10	0.01	20.89	64.19	0.57	17.95	7.80
Sterling Sterling	2019	0.93	0.90	0.10	0.01	20.89	04.19	0.57	17.93	7.80
Bank	2020	0.94	0.90	0.10	0.01	20.99	63.46	0.58	17.71	7.69
Sterling										
Bank	2021	0.96	0.91	0.09	0.01	20.82	71.38	0.58	18.06	7.84
Union Bank	0.01		- د د			•				
Of Nig	2010	1.15	1.10	0.10	0.10	20.83	23.87	0.56	17.38	7.55
Union Bank Of Nig	2011	0.98	0.81	0.19	-0.08	20.78	18.39	0.54	17.35	7.54
Union Bank	2011	0.70	0.01	0.19	-0.06	20.78	10.39	0.54	17.33	1.54
Of Nig	2012	8.11	7.99	0.19	0.01	20.76	18.58	0.57	17.06	7.41
Union Bank						·			-	
Of Nig	2013	0.96	0.80	0.19	0.00	20.73	21.39	0.55	16.98	7.37

Union Bank Of Nig	2014	0.92	0.78	0.22	0.03	20.73	27.01	0.57	17.01	7.39
Union Bank										
Of Nig	2015	2.42	2.31	0.23	0.01	20.77	29.29	0.59	17.38	7.55
Union Bank										
	2016	0.86	0.78	0.22	0.01	20.95	34.04	0.57	17.31	7.52
Union Bank						• • • •		0.70		
	2017	0.92	0.76	0.24	0.01	21.10	39.89	0.58	17.87	7.76
Union Bank	2010	0.06	0.05	0.15	0.01	21.10	24.10	0.50	17.92	774
Of Nig Union Bank	2018	0.96	0.85	0.15	0.01	21.10	34.18	0.58	17.82	7.74
l l	2019	0.96	0.87	0.13	0.01	21.35	45.77	0.57	17.98	7.81
Union Bank	2017	0.50	0.07	0.13	0.01	21.55	13.77	0.57	17.50	7.01
	2020	0.95	0.88	0.12	0.01	21.51	54.26	0.58	17.84	7.75
Union Bank										
	2021	0.96	0.85	0.15	0.01	21.10	54.26	0.58	17.84	7.75
United Bank										
	2010	1.04	0.88	0.11	0.00	21.09	29.19	0.56	17.66	7.67
United Bank	2011	0.06	0.01	0.00	0.00	21.20	27.00	0.54	17.62	7.66
	2011	0.96	0.91	0.09	0.00	21.29	27.89	0.54	17.63	7.66
United Bank For Africa	2012	1.04	0.98	0.09	0.02	21.46	31.43	0.57	17.88	7.77
United Bank	2012	1.04	0.96	0.09	0.02	21.40	31.43	0.57	17.00	7.77
	2013	1.02	0.91	0.09	0.02	21.69	38.00	0.55	18.23	7.92
United Bank	2012	1.02	0.71	0.05	0.02	21.07	20.00	0.00	10.20	,,,,
	2014	0.96	0.90	0.10	0.02	21.74	35.14	0.57	18.32	7.96
United Bank										
	2015	0.92	0.88	0.12	0.02	21.74	36.31	0.59	18.38	7.98
United Bank						• • • • •				
	2016	0.92	0.87	0.13	0.02	21.98	41.65	0.57	18.41	7.99
United Bank For Africa	2017	0.96	0.87	0.13	0.02	22.13	45.52	0.58	18.59	8.07
United Bank	2017	0.90	0.67	0.13	0.02	22.13	43.32	0.56	10.39	8.07
I I	2018	0.95	0.90	0.10	0.02	22.31	51.01	0.58	18.87	8.20
United Bank	2010	0.50	0.50	0.10	0.02	22.01	01101	3.23	10.07	0.20
	2019	0.94	0.89	0.11	0.02	22.45	54.67	0.57	19.02	8.26
United Bank										
	2020	0.94	0.91	0.09	0.01	22.76	64.07	0.58	18.94	8.23
United Bank	2021	0.00	0.0=	0.15	0.05	24.00		0 ==	40.44	-
	2021	0.92	0.87	0.13	0.02	21.98	41.65	0.57	18.41	7.99
	2010	0.98	0.83	0.17	0.05	19.38	13.67	0.56	16.34	7.10
	2011	1.64	0.83	0.17	0.01	19.38	12.13	0.54	16.03	6.96
Unity Bank	2012	1.56	1.00	0.15	0.02	19.66	19.86	0.57	16.59	7.20
Unity Bank	2013	1.41	0.93	0.07	-0.06	19.82	25.61	0.55	16.91	7.34
Unity Bank	2014	3.51	2.09	0.18	0.03	19.84	28.20	0.57	16.66	7.24
Unity Bank	2015	2.31	2.28	0.19	0.01	19.91	32.90	0.59	16.79	7.29
Unity Bank	2016	0.84	0.83	0.17	0.00	20.02	37.15	0.57	16.81	7.30
•	2017	2.59	2.55	-1.55	-0.10	18.87	12.49	0.58	17.38	7.55

Unity Bank	2018	2.09	2.03	-1.03	0.01	19.28	19.44	0.58	16.56	7.19
Unity Bank	2019	1.83	1.80	-1.00	0.01	19.44	24.40	0.57	16.78	7.29
Unity Bank	2020	1.57	1.56	-0.56	0.00	20.01	34.56	0.58	16.88	7.33
Unity Bank	2021	2.59	2.55	-1.55	-0.10	18.87	12.49	0.58	17.38	7.55
Wema Bank	2010	1.00	0.92	0.08	0.09	19.12	14.40	0.56	15.92	6.92
Wema Bank	2011	1.00	0.97	0.07	-0.02	19.19	23.47	0.54	15.76	6.85
Wema Bank	2012	1.32	1.29	0.01	-0.02	19.31	27.24	0.57	16.40	7.12
Wema Bank	2013	1.20	1.04	0.14	0.01	19.48	26.46	0.55	16.59	7.20
Wema Bank	2014	1.05	0.95	0.11	0.01	19.76	30.46	0.57	16.64	7.23
Wema Bank	2015	0.98	0.88	0.12	0.01	19.80	33.06	0.59	16.78	7.29
Wema Bank	2016	0.93	0.89	0.12	0.01	19.87	33.64	0.57	17.07	7.41
Wema Bank	2017	0.92	0.87	0.13	0.01	19.78	33.89	0.58	17.32	7.52
Wema Bank	2018	0.95	0.90	0.10	0.01	20.01	31.50	0.58	17.24	7.49
Wema Bank	2019	0.96	0.92	0.08	0.01	20.39	41.89	0.57	17.62	7.65
Wema Bank	2020	0.97	0.94	0.06	0.01	20.71	61.19	0.58	17.33	7.53
Wema Bank	2021	1.29	1.00	0.22	0.04	21.48	34.47	0.57	17.98	7.81
Zenith Bank	2010	1.07	0.76	0.24	0.02	21.15	37.94	0.56	17.39	7.55
Zenith Bank	2011	1.00	0.80	0.20	0.03	21.38	36.05	0.54	17.37	7.54
Zenith Bank	2012	1.29	1.00	0.22	0.04	21.48	34.47	0.57	17.98	7.81
Zenith Bank	2013	1.33	1.00	0.19	0.03	21.69	29.58	0.55	18.08	7.85
Zenith Bank	2014	1.01	0.85	0.15	0.03	22.05	37.43	0.57	18.49	8.03
Zenith Bank	2015	0.96	0.85	0.15	0.03	22.11	42.47	0.59	18.63	8.09
Zenith Bank	2016	0.95	0.85	0.15	0.03	22.28	50.89	0.57	18.79	8.16
Zenith Bank	2017	0.99	0.85	0.15	0.03	22.45	57.41	0.58	19.19	8.34
Zenith Bank	2018	0.98	0.86	0.14	0.03	22.51	58.36	0.58	18.79	8.16
Zenith Bank	2019	0.94	0.85	0.15	0.03	22.57	56.76	0.57	18.82	8.17
Zenith Bank	2020	0.96	0.87	0.13	0.03	22.86	53.02	0.58	18.61	8.08
Zenith Bank	2021	0.96	0.85	0.15	0.03	22.11	42.47	0.59	18.63	8.09