Capital Structure and Shareholders Value of Commercial Banks in Nigeria: A Multi-variate Study Analysis

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ABSTRACT
This study examined the effects of capital structure on shareholders' value of quoted Nigerian commercial banks from 1981 – 2014. The model built for the study proxy Return on Investment (ROI), Equity Price (EQP) and Earnings per Share (EPS) as dependent variables measuring shareholder's value as the function of percentage in Debt Capital to Total Capital (DC/TC), percentage of Equity Capital to Total Capital (EQC/TC), percentage of Preference Share Capital to Total Capital (PSC/TC as independent variables). Annual time series data were sourced from stock exchange factbook and financial statement of quoted commercial banks. The Econometrics Techniques of Ordinary Least Square (OLS), Augmented Dickey Fuller (ADF), Unit Root Test, Johansen co-integration test and pair wise Granger Causality test were employed in the empirical analysis. R^2, Regression coefficient, probability value, t-statistics and f-statistics were used to determine the extent to which the independent variables can affect the dependent variable. The co-integration result shows that long run equilibrium exists among the variables except preference share capital. In model I, the study found that all the independent variables have positive relationship with the Return on Investment. Model II found that equity capital and preference share capital have positive effects but insignificant relationship with Return on Investment while short term borrowings and preference share capital have positive relationship and debt capital have negative relationship with Equity Price of quoted commercial banks. Model III found that Equity Capital has positive relationship while debt and preference share capital have negative relationship with Earnings per Share. From the regression summary, Model I can explain 79% variation on Return on Investment, Model II explains 48% variation on Equity Prices while Model III explains only 11% variation on Earnings per Share. From the above, the study concludes that capital structure has more effect on Return on Investment and Equity prices than Earnings per Share. The study recommend that management of commercial banks should enhance its equity capital and formulate policies of sourcing low cost of debt capital to enhance the shareholders value.

KEYWORDS: *Capital Structure, Shareholders Value, Debt Capital, Equity Capital and Preference Share Capital.*

INTRODUCTION

Every corporate organization has two sources of capital which are equity and debt capital. The combination of these capitals makes up the capital structure of the firm. Determining the optimal capital structure of the firm is a critical finance management function. It involves the weighing of the pros and cons of various sources of financing and selects the most advantageous keeping in view the target capital and its effect on the value of the firm. It is continuous decision that is taken whenever a firm needs additional capital (Pandy, 2005)

In determining the optimal capital structure, modern theories takes into accounts taxes, financial distress, agency cost, information asymmetry and the effect market imperfections which are considered non existence in the Miller and Modigliani assumptions. Unlike other corporate organizations, capital structure of the banking sector is determine by the regulatory authorities, credit risk, dividend policy, Bank size, growth of assets and profitability. It comprises tier 1, tier II and tier III which is combination of equity and debt. In the conventional corporate finance theories, a bank in equilibrium will desire to hold a privately optimal capital that just trade-off cost and benefits, implying a zero relationship at the margin. Capital requirements, imposed by regulators, if they are binding force, make banks to hold capital in excess of their private optimal and hence forced banks above their internal optimal capital ratio which impose cost on banks.

However, higher capital is often supposed to be costly for banks due to capital market imperfections a tax advantages but the trade-off view, higher capital may reduce risk and hence lower the premium demanded to compensate investors for the cost of bankruptcy. Again, there may be a positive or negative relationship between capital and firm value in the short run depending on whether a bank is above or below it optimal capital ratio (Mathew *et al.,* N.D). The relationship between capital structure and the value of the firm has long been a point of controversy among scholars in corporate finance, since the seminar work of Miller and Modiglani in 1959 which noted that capital structure is irrelevant as passed to Gordon view that it is relevant. More of the empirical evidence supports the relevant view of Gordons, Delbor et al (2007), Cheng and Izeng (2011), Suderat *et al.,* (2012), Rathinasamy *et al.,* (2000), Altan and Arkan (2011), Ugbuhe and Emeni (2012) while few evidence supports to irrelevant view Aggarwary and Zhao (2007), Rayan 2008, Aggarval *et al.,* (2011). From the above, this study intends to examine the existing relationship between capital structure and shareholders' value of commercial banks in Nigeria. This paper is divided into five sections; the introductory section is followed by section II which contains the theoretical, conceptual and empirical review, Section III is the research methodology while the results and discussion is presented in section IV, Section V contains conclusion and recommendations.

Theoretical Formwork

Pecking Order Theory

Pecking order theory was formulated by Donaldson in 1961 and then modified by Stewart C. Myers and Nicolas Majluf in 1984. Pecking order theory states that funding priorities in corporate finance starts from the internal financing to the equity, according to the cost of funding, and raising equity is the last resort in financial decision.

Pecking Order Theory confirm the idea of asymmetric information, which states that managers have more information about the overall performance of their firms and additional information to the managers affects their choice of source of funding between internal and external financing, Pecking Order Theory supports the funding through debt over equity as it signals the board's confidence that the investment is profitable and that the current stock price is undervalued. Funding through equity would signal management distrust and a feeling of overvalued of the stock price. Thus, an issue of stocks would lead to a drop in share price. Experimental studies in testing the pecking order theory were unable to provide evidence that the theory is considered the most important in explaining the firm's capital structure. Fama and French (2002) and Myers and Shyam-Sunder (1999) concluded the Pecking Order theory was better able to explain some of the data features than trade-off theory. Frank and Goyal (2003) proved that Pecking Order Theory fails where it should hold.

Trade off Theory

The classical version of the Trade off theory goes back mainly to the Kraus and Litzenberger (1973) who considered a equilibrium between the weight costs of bankruptcy and the tax saving advantage of debt. This theory is often set up as an alternative theory to the Pecking Order Theory. The Trade off Theory aimed to explain the fact that firms usually use a structure of debt and equity to finance their needs of funds, and states that there is an advantage of debt financing , the tax shield, and there is a cost of financing with debt, the financial distress, bankruptcy and non-bankruptcy. The benefits of the debt financing declines as debt increases, while the cost increases, therefore, to maximize the overall value of the firm, firms have to focus on the trade off when choosing how much debt and equity to use for financing.

Agency Cost Theory

Agency costs theory expresses the conflicts between owners and managers. Owners surely expect managers to maximize their wealth through their decisions. In contrast, managers seek to increase their salaries and reward, without paying good attention to the wealth of the owners. Therefore, the conflict between the owners and managers occur when the owners' agent "managers" places their personal financial interests the owners'. Agency costs can be either:
A) The costs borne by the firm if the management uses the firm's resources for their own benefit; and B) The cost of means that owners use to stop the managers from achieving their own interests over the owners' .To stop or mitigate the agency problem, owners sometimes provides incentives to keep their interest in the top. This usually means paying bonuses to managers if and when the value of the firm increases. These monetary incentives are an example of agency costs. If the incentive plan works as expected, then, these agency costs will be less than the cost of allowing the agents to act in their own interests. Denis and Milov (2002) argue that a firm's decision to fund through debt means that the firm will be restricted by the debt holder and this fruition a control means optionally chosen by the firms' owners. De Andres Alonso, Inturriaga, Sanz and Gonzalez (2005) agree with this view, and proposed that this action is also a signal of a pledge to self-regulation, which reduces debt agency costs.

Market-timing theory

Market-timing theory was formulated by Baker and Wurgler (2002), this theory suggests that when there is a chance for companies to issue equity at higher price, firm is more likely to execute this opportunity. More specifically, managers are able to identify certain time periods

during which equity issuance is less costly due to the high valuation of company's stock. When managers issue equity when market value of equity is high, firm's costs of equity would be relatively lower. In this case, managers would be increasing the value of the firm at the expense of new shareholders and the benefits would be transferred to current shareholders.

Life Stage Theory

Frielinghaus, Mostert and Firer (2005), states that the basic idea of organizational life stage theory is that firms growth through a number of life stages that begins at birth and ends in death. Bender and Ward (1993) argued that the capital structure of a firm could be influenced by its life stage, because financing needs could vary as firm's circumstances do. Bender and Ward also maintained that business risk decreases with the progress of the company's age, allowing financial risk to increase. Hovakimiam, Opler and Titman (2001) argued that firms should utilize a higher ratio of debt to finance fixed assets, and therefore firms should have higher debt in their capital structure as they mature. Frielinghaus, Mostert and Firer (2005) Concluded that mature companies have more debt in their capital structure.

STRUCTURE OF BANK REGULATORY CAPITAL

Tier 1 Capital This includes only permanent shareholders' equity (issued and fully paid ordinary shares/common stock and perpetual non-cumulative preference shares) and disclosed reserves (created or increased by appropriations of retained earnings or other surpluses). In the case of consolidated accounts, this also includes minority interests in the equity of subsidiaries which are not wholly owned. This basic definition of capital excludes revaluation reserves and cumulative preference shares. There is no limit on the inclusion of Tier 1 capital for the purpose of calculating regulatory capital. For this purpose, the equity shares with the following characteristics are included in Tier 1 capital: Issued directly by the bank;

- Clearly and separately identified in the balance sheet
- Have no maturity (are perpetual);
- Fully paid;
- Cannot be refunded beyond the possibility of the liquidation of bank or reduction of share capital;
- Do not give to the holder rights to a minimum remuneration nor are there any clauses that require the compulsory payment of dividends.
- The dividends are paid solely out of distributable profits or retained earnings distributable; classified as equity instruments in accordance with IFRS.

Tier 2 Capitals

Revaluation Reserve

Fixed Asset Revaluation Reserve: This relates to revaluation of fixed assets in line with market values reflected on the face of the balance sheet. Prior approval of the CBN must be obtained by any bank before the recognition of the revaluation surplus on fixed assets in its books, which can only be done taking into consideration the following:

The valuation must be made by qualified professionals and the basis of the revaluation as well as the identities of the valuers must be stated. The difference between the market and historic values of the eligible fixed assets being revalued shall be discounted by 55%. The revaluation of fixed

assets is applicable to own premises only; and the revaluation of fixed assets (own premises only) is permissible within a minimum period of seven years after the date of the purchase of the asset or the last revaluation.

Other revaluation reserves: The inclusion of other revaluation reserves created by the adoption of the international Financial Reporting Standards (IFRS) as part of the Tier 2 capital shall be subject to the limitations that will be specified by the CBN from time to time.

General provisions/General loan-loss reserves For the purpose of the standardized credit risk measurement approach, provisions or loan-loss reserves held against future (presently unidentified), losses are freely available to meet losses which subsequently materialize and therefore qualify for inclusion in Tier 2 capital. Provisions ascribed to specific or identified deterioration of particular assets or known liabilities, whether individual or grouped (collective), are excluded. Furthermore, general provisions/general loan-loss reserves eligible for inclusion in Tier 2 will be limited to a maximum of 1.25 percentage points of credit risk weighted assets and subject to the approval of the CBN.

Hybrid (Debt/equity) capital instruments: These include financial instruments which combine characteristics of equity and debt capital. Essentially, they should meet the following requirements:

- They are unsecured, subordinated and hilly paid-up;
- They are not redeemable at the initiative of the holder or without the prior consent of the CBN.
- They are available to participate in losses without the bank being obliged to cease trading (unlike conventional subordinated debt);
- Although the capital instrument may carry an obligation to pay interest that cannot permanently be reduced or waived (unlike dividends on ordinary shareholders equity), it should allow service obligations to be deferred (as with cumulative preference shares) where the profitability of the bank would not support payment.
- Hybrid capital instruments that are redeemable must have a maturity of at least 10 years. The contract must clearly specify that repayment is subject to authorization by the Central Bank of Nigeria. Cumulative preference shares, having these characteristics, would be eligible for inclusion in this category.

Subordinated term debts Subordinated debts issued by banks shall form part of the Tier 2 capital provided that the contracts governing their issue expressly envisage that:

- In the case of the liquidation of the issuer, the debt shall be repaid only after all other creditors not equally subordinated have been satisfied.
- The debt has an original maturity of at least five years; where there is no set maturity; repayment shall be subject to at least five years' prior notice.
- Early repayment of the liabilities may take place only at the initiative of the issuer and shall be subject to approval of the CBN.
- The contracts shall not contain clauses whereby, in cases other than those referred to in points a) and c), the debt may become redeemable prior to maturity.
- During the last five years to maturity, a cumulative discount (or amortization) factor of 20% per year will be applied to reflect the diminishing value of these instruments as a

continuing source of strength. Unlike instruments included in hybrid capital above, these instruments are not normally available to participate in the losses of a bank which continues trading. For this reason, these instruments will be limited to a maximum of 50% of Tier 1 Capital (Akani and Lucky, 2015)

Tier 3 Capital

The principal form of eligible capital to cover market risks consists of shareholders' equity and retained earnings (Tier 1 capital) and supplementary capital (Tier 2 capital). But, subject to prior approval from the Basel II, banks may employ a third tier of capital (Tier 3), consisting of short term subordinated debt as defined in paragraph 49(xiv) of Basel II, for the sole purpose of meeting a proportion of the capital requirements for market risks, subject to the conditions in paragraph 49(xiii) and 49(xiv).

Deductions from total of tier 1 capital and tier 2 capital

Normal accounting practice prescribes the consolidation of the assets and liabilities of all members of a group when preparing group accounts. Where a group excludes subsidiaries, deduction from capital is essential to prevent the multiple uses of the same capital resources in different parts of a group. The following deductions should be made from the sum of tier 1 and tier 2 capital to take account of this and in those instances where banks have cross shareholdings in other banks:

Banking, securities and other financial subsidiaries

Under Basel II, banking and financial subsidiaries should be consolidated, and if not consolidated, the investment should be deducted from the capital base. International Accounting Standards define subsidiaries as companies incorporated in their home country or abroad which the bank controls (directly or indirectly holds 50% or more of the ordinary share capital) or in which the bank has a controlling influence (for example, via the composition of the board of directors) where it holds less than 50% of the ordinary share capital. All banking and financial subsidiaries should be consolidated, except in certain cases as described in International Accounting Standard No.27, Consolidated Financial Statements and Accounting for Investments in Subsidiaries (issued by the International Accounting Standards Committee) which requires or permits exclusion from consolidation, for example, when:

- Control of the subsidiary is temporary; or
- Control does not exist in reality; or
- Control is impaired by restrictions on the transfer of funds.
- Significant minority investments in banking and other financial entities

Investments in banking and other financial entities of 20% and above, up to 50% should normally be deducted from the capital base.

Investments in other banks or financial institutions

This represents cross shareholdings between two or more banks or financial institutions wherein they hold a similar amount of each other's Capital. In such circumstances, these amounts must be deducted from the total of the capital base.

Investments in insurance entities

For investments in insurance entities, an investment in such an entity of 10% or above would lead to deduction from the capital base. Banks may recognize surplus capital in insurance subsidiaries as per the criteria and disclosure requirements explained in Paragraph 33 and footnote 10 of Basel II.

Significant investments in commercial entities

Significant minority and majority investments in commercial entities that exceed materiality levels of 15% of the bank's capital for individual significant investments in commercial entities, and 60% of the bank's capital for the aggregate of such investments will be deducted from the capital base. The amount deducted would be the portion of the investment above the materiality level. Investments in significant minority-owned /majority-owned and controlled commercial entities below the materiality levels noted above will be risk-weighted at no lower than 100% for banks using the standardized approach. As a transitional arrangement, banks holding such investments at 1January 2008, that exceed the materiality levels stated above, will be permitted to reduce the excess of their investments over a period not extending beyond 1 January 2011. The impact would be that banks with these investments will not be required to deduct the excess over 15% from capital but will risk weight at 100%

Other Deductions - Securitized Assets

Exposures to securitized assets under the Standardized Approach are detailed under Paragraph 538 to 605 of Basel II. Such exposures that are rated B+ and below (Long-Term), below A-3/P-3 (Short-term), or are un-rated must be deducted from the capital base.

Deduction of investments in accordance with above requirements

Where deductions of investments are made pursuant to this part on scope of application, the deductions will be 50% from Tier 1 and 50% from Tier 2 capital.

VIEWS OF BANK CAPITAL

Regulatory View

Banks do, as such, not differ significantly from non-financial firms. Surely, they differ in terms of business model and the way they interact with and have a spill-over effect to society as a whole. In terms of capital structure, i.e. the mix between debt and equity needed to finance investments, they do however not differ substantially (although the proportions between debt and equity might differ, cf. subsection 3.2) - if it was not for the regulatory framework, that is. In that respect, two elements form the major distinction between capital in banking and non-financial firms: the regulatory capital requirements as stipulated in the Basel Accords, and the regulatory safety net in the form of deposit insurance (Berger et al., 1995). As previously noted, both of them are established in order to ensure financial stability, protect depositors and mitigate bank fragility. Moreover, the regulatory requirements is also based on a need to mitigate those moral hazard incentives from deposit insurance, which implies that banks should choose extreme levels of leverage. Hence, the two aspects act as tools, which are used to limit the negative externalities caused by bank failures.

Thus, taking these two major differences between banks and non-financial firms to the limit, one would expect that there should be little or no cross-sectional variation and that standard corporate finance determinants do not have any explanatory power (Kalemi-Ozcan and Sorensen, 2012),

even if this previously has been the case, that those standard determinants actually did have some explanatory power of bank capital structure, one would expect a lower degree of explanatory power alongside a tightening of the regulatory framework. Thus, the first hypothesis posited in terms of the subsequent empirical analysis of bank capital structure can be stated quite short, that standard corporate finance determinants should have no or little explanatory power.

Buffer View

Still departing from a banking perspective, but relaxing the assumption that regulation should be the overriding determinant of bank capital structure, the buffer view is introduced. The buffer view has been extensively examined in various applications, where the argument is that banks hold capital well above the regulatory requirement in order to avoid the cost of having to issue equity at short notice as a consequence of violating the minimum capital requirements. Hence, such a capital buffer protects the bank against costly and unexpected shocks, if the costs of financial distress stemming from holding low amounts of capital are substantial and the transactions costs of raising new capital quickly are very high (Berger et al., 1995). Put differently, according to the buffer view, banks hold capital buffers to mitigate the asset risks needing to be managed, such that the bank can satisfy its minimum capital requirement even under relatively adverse future scenarios (Keppo and Peura, 2006). The buffer view is actually a dynamic version of the charter value theory, in which banks with high charter value face significant bankruptcy cost, since they have future profits to lose (Jokipii and Milne, 2011). Moreover, according to the buffer theory, banks face costs of both altering the level of capital as well as allowing capital to fall below the required minimum amount. Jokipii and Milne (2011 argued that these costs are both explicit and implicit, where the implicit costs of regulation may stem from regulatory interference, whereas explicit costs relate to penalties and/or restrictions imposed by the supervisory authorities due to a breach of the regulatory requirements, which might even lead to bank closure.

The specific amount of capital in excess of the regulatory requirements, the discretionary capital, is determined by various determinants based on bank characteristics (Jokipii, 2008).

Standard Corporate Finance View

Ever since the pioneering work of MM in 1958, much financial research has been focused on the financing decisions of firms; and, more importantly, the researching community tends to argue about the empirical facts. As to this date, consensus has not yet been reached; however, a large range of theories has been proposed in the search for the answer to corporate financing decisions, and some have shown a tenacious nature. They are normally and with good reason build on the characteristics of non-financial firms. In this review, a number of these theories all departing from MM's irrelevance proposition with relaxed assumptions will be examined. The focal point will be the capital structure theories as they were originally put forth in the context of non-financial firms, after which comments on the possible relevance to banks will be made where appropriate and possible. This subsection focuses on three main theories: the Trade-Off Theory, Pecking Order Theory, and Agency Theories. Neither of the three is mutually exclusive, but can serve as joint explanations of the aggregate picture of a firm's financing decisions14. Those theories have, although dating back to the 1970s and 1980s, proved valuable in several empirical examinations, and the incentives and problems driving the theories taxes, information and agency costs are evident in much financing tactics (Myers, 2001). Completing this discussion of the theory of capital structure, the more recent Market Timing Hypothesis will be introduced.

Those theories are a non-exhaustive list of capital structure theory, but is believed to include the most relevant and significant contributions to theory.

The Basel Accords Initiating with the reasoning behind the existence of regulation of financial institutions, one recognizes that in the absence hereof, the risk of market failures, such as externalities, market power, or information asymmetry between buyers and sellers, could potentially be severe (Santos, 2001). As a consequence, local FSA's regulate the banking sector in their respective countries, which is a result of the work by the European Union resulting in the Capital Requirement Directive's. The CRD legislation is relevant for this investigation, since those directives must be followed and implemented by EU member countries. The directives are highly influenced by the Basel Accords created by the Basel Committee. These accords work as regulatory suggestions and recommendations, which have been highly debated and is the point of departure in many academic papers. Thus, the discussion inherent in this section will focus on the Basel Accords rather than the CRD's, while having in mind that the CRD's set the rules that must be followed by EU banks. As mentioned in the outlining of the chapter, the Basel Committee on Banking Supervision (BCBS) has by now introduced three accords. These have been highly discussed topics in over 25 years, and have had a great influence on banks. This paragraph is initiated with a historical review of the Basel Accords, where the focal point will be on the first two Basel Accords, since these dominated the regulatory framework in the period of investigation. However, since Basel III recently has been introduced, some anticipation effects could potentially be expected, and will nevertheless act as a key factor in the discussion in the concluding remarks, which is why this accord also briefly will be discussed.

CRITICISM OF THE BASEL ACCORDS

The Basel Committee took on a simple approach to supervise the banking sector. It was understood that the Basel accords should not be able to account for every risk; on the contrary it should only serve as a backstop, implying that it is only a minimum requirement procedure. Haldane (2012) points out that BCBS has become self-calibrating, implying that they adjust the accords in order to be acknowledged from both regulatory bodies and the banking sector. Furthermore, Haldane (2012) points out that the Basel framework has become too comprehensive, and that the banking sector is using too many and unnecessary resources in order to comply with the capital requirements. More specifically, the Basel framework implies using e.g. a Value-at-Risk method, which was limited to a few calculations in the Basel I framework, whereas it now includes several millions (Haldane, 2012). Haldane (2012) mention that both the numerator and denominator of the regulatory capital ratios have become too complicated. The latter regarding the assessment of RWA is supported by many authors and practitioners, among others Admati et al. (2010), and has very recently been acknowledged by the committee itself (BCBS, 2013). More specifically, the third pillar should make the assessment of the RWA very transparent, which however not has been the case, as Groenborg and Holm (2013) have shown in an investigation of Nordic banks.

EMPIRICAL REVIEW

Over the years, scholars have devoted time to study the relationship between corporate capital structure and the value of listed firms. The objectives of some of the research are to test the validity of Miller and Modigliani.

Cheng and Tzeng (2011) investigated whether and to what extent leverage has impact on firm value for 645 companies listed in Taiwan Securities Exchange (TSE) over the period 2000-2009. The authors used Altman's Z-score as a proxy of the firm bankruptcy probability and argued that this score is also a proxy for measuring firm quality. The higher firm's quality may improve firm's credit rationing by debt holders and equity holders. Better credit rationing will result in a reduced cost of capital and increased firm value. By applying the fixed effects model, the results indicated the following:

- the value of leveraged firms is greater than the value of unleveraged firms when not considering bankruptcy probability;
- taking into account the benefits and costs of debt simultaneously, leverage is positively related to firm value before reaching firm's optimal capital structure;
- The positive influence of leverage on firm value tends to be stronger when firm's financial quality is better (i e. the greater Z-score).

Rathinasamy et al. (2000) also reported a positive correlation between capital structure, measured by total debt ratio and long-term ratio, and market power measured by Tobin's Q.
Aggarwal and Zhao (2007) used a sample of 27,237 observations regarding financial data from COMPUSTAT's P/S/T and Research annual industrial tapes from 1980 to 2003 and proved that, after controlling for industry leverage effects in estimating the leverage–value relationship, leverage is negatively correlated with value for both high and low growth US firms. Rayan (2008) also investigated whether capital structure positively influences the value of the firm. The study was conducted on all firms listed on JSE2 excluding the banking industry for the period 1997-2007. The debt to equity ratio was used as a proxy for capital structure and the following ratios were used for firm value: Earnings per Share, Price Earnings Ratio, Return on Equity, and Return on Assets, Earnings Value Added, and Operating Profit Margin. The findings indicated an inverse relationship between financial leverage and firm value. Also, the results for the various industries proved that capital structure is different for different industries. According to McConnell and Servaes (1995), the influence of debt on firm value depends on the presence of growth opportunities. For firms facing low growth opportunities, the debt ratios are positively related to firm value. For firms facing high growth opportunities, the debt ratios are negatively related to firm value. There results were also supported by Agrawal and Zhao (1996), Chen (2002) and Alonso at el. (2005) and were rejected by Harvey et al. (2004) and Aggarwali and Zhao (2007).

De Jong (2002) measured the relationships between leverage, Tobin's Q and corporate governance characteristics for Dutch listed non-financial firms over the period 1992-1997. The study used simultaneous equations model to deal with this simultaneous nature of the relation between leverage and firm value. Thus, two equations were estimated simultaneously: Leverage was found to have a significantly negative impact on firm value. This result rejected the disciplining and value-enhancing role for leverage.

Dessi and Robertson (2003) also estimated the relationship between capital structure and firm value using the simultaneous equation method on a sample of 557 UK firms over the period 1967–1989. The results showed that unobserved firm heterogeneity, as reflected in the fixed effects, is a highly significant determinant of both leverage and firm value. Within a static

framework, leverage had a significant positive effect on firm value, even when fixed effects were included. However, leverage had no longer a significant impact on firm value when controlling for the endogeneity of capital structure. The results from the dynamic model confirmed the findings from the static model: the estimated coefficient for debt in the dynamic equation is positive and significant when not controlling for the endogeneity of debt, but it becomes insignificant when controlling for the endogeneity of debt. Berger and Bonaccorsi di Patti (2006) argued that prior research did not take into account the possibility of reverse causality from performance to capital structure, which may result in simultaneous-equations bias.
They addressed this problem by allowing for reverse causality from performance to capital structure. A sample of 7320 U.S. commercial banks from 1990 through 1995 was used and a two-equation structural model was estimated using two-stage least squares (2SLS).The findings were consistent with the agency costs hypothesis – higher leverage was associated with higher profit efficiency. With respect to the reverse causality from efficiency to capital structure, the results indicated a strong, consistent dominance of the efficiency-risk hypothesis over the franchise-value hypothesis5, suggesting that more efficient companies use more debt than less efficient companies.

Dragotă et al. (2008) addressed the reverse causality between capital structure and firm profitability of the Romanian listed companies for the period 1997-2005 using Granger Causality Test. The results indicated that capital structure does not Granger cause financial returns and the hypothesis that financial returns does not Granger cause capital structure could not be rejected. Imad (2015) examined the impact of the leverage on the firms' value utilizing unbalanced pooled Ordinary Least Square (OLS) cross-sectional time series panel data regression approach to all listed companies in Amman Stock Exchange (ASE) during the period 2000-2013 after excluding the financial sector and services sector, due to their own characteristics. F-test was used to test the hypothesis that the changes in the firms' leverage level significantly explain the changes in the firms' value. The results shows that the firms' leverage level affect the firms' value for the Jordanian listed companies included in the sample test, this result inconsistent with the result of Rajan and Zingales (1995) who find inverse association between debt and performance.

Simona (N.D) investigated the impact of capital structure on firm value for Romanian companies at the same time considering the determinants of leverage. In addition to this, the paper tries to empirically test the influence of debt structure on firm value given different growth opportunities of Romanian companies. The sample included 48 companies listed on Bucharest Stock Exchange for the period 2003-2012. Five regression models were used: Pooled regression model, fixed effects model, Time effects model, the two way fixed effects model and Simultaneous regressions model. The results show that capital structure has a positive impact of firm value, for both firms facing low growth opportunities and firms facing high growth opportunities. Profitability, liquidity and tangibility have been found as negative determinants of capital structure, while growth opportunities, firm size and firm financial quality have been found as positive determinants of capital structure.

Mathew et at., (N.D) examines the effect of capital ratios on bank profitability over economic cycles using data from the US banking sector spanning several economic cycles from the late 1970s to the recent financial crisis of 2008-10. This relationship is likely to be time-varying and

heterogeneous across banks, depending on banks' actual capital ratios and how these relate to their optimal (profit-maximizing) capital ratios and we employ an empirical framework which allows substantial heterogeneity across banks and over time. While the average relationship across banks is negative for most banks in most years, it turns less negative or positive under distressed market conditions, namely the savings and loan crisis of the late 1980s and the recent global financial crisis of 2008-10. This is consistent with the hypothesis that in such conditions, increases in capital ratios are less costly for banks than in other periods. Since other factors may drive the long-run relationship between capital and profitability, we also examine the effect of short-run deviations from estimated long-run capital targets. Banks with a surplus of capital relative to target exhibit a strongly negative relationship between capital and profitability, both in stressed and non-stressed conditions, implying that reducing capital may be the optimal strategy for these banks. They concluded with policy implications, namely that counter-cyclical variation in capital requirements envisaged under Basel III will need to be large in order to achieve macro-prudential aims of smoothing credit cycles.

Xicang et al (2012) intended to provide evidence on the impact of capital structure on a firm's value. The analysis was implemented on all the 34 companies quoted on the Ghana Stock Exchange (GSE) for the year ended 31st December 2010. The ordinary least squares method of regression was employed in carrying out this analysis. The result of the study reveals that in an emerging economy like Ghana, equity capital as a component of capital structure is relevant to the value of a firm, and Long-term-debt was also found to be the major determinant of a firm's value.

Section III: RESEARC METHODS

This study was motivated to examine the relationship between capital structure and shareholders' value of quoted commercial banks in Nigeria. Data was sourced from Stock Exchange Factbook and Financial Statement of the commercial banks.

MODEL SPECIFICATION

The models specified below are based theories and empirical studies.

ROI= f(DC/TC, EQC/TC, PFS/TC) (1)

Transforming equation I into a testable form, we have;

$ROI=\beta+\beta_1 DC/TC + \beta_2 EQC/TC + \beta_3 PFS/TC + \mu$ (2)

EQP= f(DC/TC, EQC/TC, PFS/TC) (3)

Transforming equation 3 into a testable form, we obtain;

$EQPI=\beta+\beta_1 DC/TC + \beta_2 EQC/TC + \beta_3 PFS/TC + \mu$ (4)

EPS= f(DC/TC, EQC/TC, PFS/TC) (5)

Transforming equation 4 into a testable form, we have;

$EPS=\beta+\beta_1 DC/TC + \beta_2 EQC/TC + \beta_3 PFS/TC + \mu$ (6)

Where:

ROI = Return on Investment

EQP	=	Equity Price of the Commercial Banks
EPS	=	Earnings per Share
DC/TC	=	Percentage of Debt to Total Capital
EQC/TC	=	Percentage of Equity to Total Capital
PFS/TC	=	Percentage of Preference Share to Total Capital
β_0	=	Regression Intercept
$\beta_1 - \beta_3$	=	Coefficient of the Independent Variables
μ	=	Error Term

STATIONARITY TEST

To determine the stationarity, the study apply the Augmented Dickey Fuller Unit Root Test with automated length selection using the Akaike Information Criterion (AK) to ascertain if the mean and the autocorrelation of the series do not depend on time (Campbell and Perron, 1991). The ADF test brings into play the (agreed dependent variable as explanatory variables to approximate for autocorrelation (Omiete and Onyemachi, 2015). The ADF test stastistics is mathematically stated as:

$$\Delta y_t = c + \beta_t + \alpha y_{t-1} + \sum_{t-i}^{k} \gamma_j \Delta y_{t-j} + \varepsilon_t \quad 7$$

$$\Delta y_t = c + \alpha y_{t-1} + \sum_{t-i}^{k} \gamma_j \Delta y_{t-j} + \varepsilon_t \quad 8$$

Equation 7 is determined to test for the null hypotheses of non stationarity of unit root against trend stationaerity alternative in Y_t where y refers to the examined time series. Equation 6 is determined to tests the null hypotheses of a unit root against a mean stationarity alternative.

Johansen Co-integration Test

The co-integration test determined whether a long run equilibrium relationship exist among the variables. It is generally accepted that to establish a co-integration, the likelihood ratio must be greater than the Mackinnon critical values. The model can be stated as

$$\Delta X_t = \mu + \Psi_1 \Delta X_{t-1} + \Psi_2 \Delta X_{t2} + \ldots + \Psi_{p-1} \Delta X_t - p + 1 \quad 9$$

Where μ is a constant term.

ΔX_t Represents the first co-integrating differences

Vector Error Correction Model

Empirically analyze the data with the Vector Error Correction (VEC) Model. Vector Error Correction (VEC) model is a restricted VAR which is designed for use with non-stationary series that are known to be co-integrated. The VEC has co-integration relations built into the specification so that it restricts the long-run behavior of the endogenous variables to converge to their co-integrating relationships while allowing for short-run adjustment dynamics. The co-integration term is known as the error correction term since the deviation from long-run equilibrium is corrected gradually through a series of partial short-run adjustments.

Our VEC model is:

$\Delta y1, t = \alpha 1\ (y2, t-1 - \beta y1, t-1) + \varepsilon 1, t \quad 10$

$\Delta y2, t = \alpha 2\ (y2, t-1 - \beta y1, t-1) + \varepsilon 2, t \quad 11$

The right-hand side variable is the error correction term; and is zero in the long run. But a deviation of y1 and y2from equilibrium makes the error correction term to be nonzero and each

will have to adjust to equilibrium. The coefficient α1 measures the speed of adjustment of the i-th endogenous variable towards the equilibrium (Omiete and Onyemachi, 2015).

Granger Causality Test

Granger (1969) approach to the question of whether two variables X causes Y is to see how much of the current Y can be explained by past values of Y and then to see whether adding lagged values of X can improve the explanation. Vesela (2010) noted that the Granger test assumes that all information for predicting chosen variables is included in the very past values of the variables. Y is said to be Granger-caused by X if X helps in the prediction of Y, or equivalently if the coefficients on the lagged X's are statistically significant If it found that "X Granger causes Y", this does not mean that Y is the effect or the result of X. ranger causality measures precedence and information content but does not by itself indicate causality in the more common use of the term.

$$Y_t = \alpha_o + \sum_{i=1}^{n} \alpha_1^{y} Y_{t-1} \sum_{i=1}^{n} X_{a1} X\mu \qquad 12$$

$$X_t = \beta_o + \sum_{i=1}^{n} {}^{y}_{\beta 1} Y_{t-1} \sum_{i=1}^{n} X_{\beta 1} XY_t \qquad 13$$

In case we do not find any evidence for Co-integration among the variables, the specification of the Granger causality will be a Vector Autoregression (VAR) in the first difference form. However, if will find evidence of Co-integration, there is the need to augment the Granger-type causality test model with a one period lagged error term. This is a crucial step because as noted by Engel and Granger (1987).

RESULTS AND DISCUSSION

The following tables proved the short-run and long-run relationship that exist between the dependent and the independent variables as formulated in the regression model.

Table 1: Regression Results

Model	Variables	Co-efficient	Std Error	T-statistics	Prob.
1	DEBT_TC	4.212114	7.263707	0.579885	0.5663
	EQC_TC	12.76147	2.040717	6.253426	0.0000
ROI	PFC_TC	2.900124	2.102557	1.379332	0.1780
	β_0	106.7521	87.22053	1.223933	0.2305
	R_2	0.794551	-	-	-
	F-Statistics	29.00541	-	-	-
	Probability	0.000000	-	-	-
	D.W	0.658280	-	-	-
2	DEBT_TC	-8.544783	7.039780	-1.213785	0.2343
	EQC_TC	9.126071	1.977806	4.614240	0.0001
EQP	PFC_TC	0.266103	2.037739	0.130587	0.8970
	β_0	62.39099	84.53169	0.738078	0.4662
	R_2	0.484447	-	-	-
	F-Statistics	7.047489	-	-	-

	Probability	0.000399	-	-	-
	D.W	1.974688	-	-	-
3	DEBT_TC	-0.374509	1.893008	-0.197838	0.8445
	EQC_TC	0.755146	0.531835	1.419887	0.1659
EPS	PFC_TC	-0.086596	0.547951	-0.158036	0.8755
	β_0	43.91819	22.73071	1.932108	0.0628
	R_2	0.111791	-	-	-
	F-Statistics	0.943961	-	-	-
	Probability	0.452223	-	-	-
	D.W	0.808180	-	-	-

Source: Author's computation from E-view.

ANALYSIS OF REGRESSION RESULTS

Model I was specified to investigate the relationship between capital structure and the profitability of commercial banks in Nigeria. The result reveals that independent variables can explain 79.4% variation on the dependent variable. The f-statistics of 29.00541 and the probability of 0.000000 indicate the significance of the regression model, the Durbin Watson statistics of 0.658280 is less than 1.00 which signifies the presence of negative serial autocorrelation. Beta coefficient of the variables proved that all the independent variables have positive relationship with the dependent variable. The probability and T-statistics shows that equity capital is statistically significant while debt capital and preference share capital is statistically significant wile debt capital and preference share capitals are statistically not significant.

Model II was formulated to examine the effect of capital structure on the equity price of commercial banks. Findings proved that the independent variables can explain 48.4% variation n the dependent variables (R^2). The F-statistics proved a significant coefficient of 7.047489 with the probability of 0.000399 while the Durbin Watson Statistics of 1.974688 is greater than 1.00 but less than 2.00, this signify the presence of negative serial autocorrelation. The T-statistics and probability coefficient show that equity capital is significant. The Beta coefficient of the independent variable indicates that debt capital have negative relationship with equity price, while equity capital and preference share capital have positive effect on the equity prices of commercial banks. The negative effect of debt capital can be traced to high cost of debt and the unparallel nature of Nigerian debt market.

Model III was formulated to determine the effect of capital structure on the earnings per share of the listed commercial banks. The model summary reveals that the independent variables can only explain 11.1% variation on the dependent variable. The F-statistics of 0.943961 with the probability of 0.452223 indicate that the model is not significant. The Durbin Watson statistics of 0.808180 is less than 1.00, this signify the presence of positive serial autocorrelation. The Beta coefficient indicates that debt capital and preference share capital have negative effect on Earnings per share while equity capital has positive effect. The positive effect of the independent variables on the dependent on the dependent variables confirms the a-priori expectation of the result and validates the classical opinion of Gordons on the relevance of capital structure. The positive effect of the variables confirms the findings of Imad (2015), Dessi and Roberton (2003)

Xieang *et al.* (2012), Berger and Bonadorsi de Patti (2006) and the findings of but contrary to the findings of Dejong (2002), Diagota *et al.* (2008) and Rayan *et al.* (2008).

Comparing the affect of the independent variables on the dependent variables, the explained variation and the fitness of the model is greater on Return on Investment and Equity prices. Model III proved that the variables cannot account for significant effect of change of Earnings per share of the commercial banks. Beta coefficient of the independent variables shows variation on the effect on the dependent variables, equity capital have positive effect on the dependent with 12.76147 on ROI, 9.126071 on EQP and 0.755146 on EPS. Debt capital have positive effect on ROI with coefficient of 4.212114 but negative effect on EQP with the coefficient of -8.544783 and -0.374509 while preference share capital have positive effect on ROI with coefficient of 2.900124 and EQP with 0.266103 but negatively related to EPS with -0.086596.

Table 2: Stationarity test at Level

Variables	**ADF Statistics**	**Mackinnon Critical Values**				
		1%	**5%**	**10%**	**Prob.**	**Order of Integration**
ROI	-1.915974	-3.653730	-2.957110	-2.617434	0.9997	1 (0)
EQP	-4.580380	-3.699871	-2.976263	-2.627420	0.0012	1 (1)
EPS	-2.231407	-3.689194	-2.971853	-2.625121	0.2003	1 (0)
DEBT_TC	-3.062328	-3.639407	-2.951125	-2.614300	0.0392	1 (0)
EQC_TC	-1.533589	-3.639407	-2.951125	-2.614300	0.5048	1 (0)
PFC_TC	-1.587280	-3.646342	-2.954021	-2.615817	0.4777	1 (0)

Source: Author's computation from E-view

The table above presents the stationarity test of the variables. The result proves that all the variables are not stationary at level except ROI. The McKinnon critical values are greater than the ADF statistics at 1%, 5% and 10% and the probability values are greater than the critical values of 0.05% at 5% level of significant. This implies that we accept null hypotheses of non-stationarity.

Table 3: Stationarity test at FIRST DIFFERENCE

Variables	**ADF Statistics**	**Mackinnon Critical Values**				
		1%	**5%**	**10%**	**Prob.**	**Order of Integration**
ROI	-8.799037	-3.646342	-2.954021	-2.615817	0.0000	1 (1)
EQP	-7.779495	-3.711457	-2.981038	-2.629906	0.0001	1 (1)
EPS	-5.565422	-3.689194	-2.971853	-2.625121	0.0001	1 (1)
DEBT_TC	-7.196848	-3.653730	-2.957110	-2.617434	0.0000	1 (1)
EQC_TC	-6.938514	-3.653730	-2.957110	-2.617434	0.0000	1 (1)
PFC_TC	-4.668769	-3.653730	-2.957110	-2.617434	0.0007	1 (1)

Source: Author's computation from E-view

From the table above, the ADF coefficients are greater than the McKinnon critical values at 1%, 5% and 10%. The probability values of the variables are less than 0.05 at 5% level of significance, this implies that the variables are stationary at first difference and in order of 1 (1). The null hypotheses are rejected and the alternate accept.

Table 4: Johansen Co-integration Test (TRACE TEST)

Model	Hypotheses CE	Eigen Value	TRACE Statistics	Critical Value 5%	Prob.	Remark
1	$r \leq 0$	0.762348	106.8445	69.81889	0.0000	Significant
	$r \leq 1$	0.537968	59.42518	47.85613	0.0029	Significant
ROI	$r \leq 2$	0.199371	13.12760	15.49471	0.1102	Not Significant
	$r \leq 3$	0.160920	5.789812	3.841466	0.0161	Significant
2	$r \leq 0$	0.802342	124.7450	69.81889	0.0000	Significant
	$r \leq 1$	0.674833	71.24486	47.85613	0.0001	Significant
EQP	$r \leq 2$	0.308893	12.80682	15.49471	0.1221	Not Significant
	$r \leq 3$	0.018453	0.614634	3.841466	0.4330	Not Significant
3	$r \leq 0$	0.756181	88.85102	69.81889	0.0007	Significant
	$r \leq 1$	0.541425	42.27712	47.85613	0.1511	Not Significant
EPS	$r \leq 2$	0.171969	7.904566	15.49471	0.4756	Not Significant
	$r \leq 3$	0.049558	1.677320	3.841466	0.1953	Not Significant

Source: Author's computation from E-view

The co-integration result presented in table 4 above shows at least two co-integrating equations in relationship to return on Investment, One co-integrating equation in relation to equity price and one co-integrating equation in relation to Earnings per Share.

Table 5: Johansen Co-integration Test (MAXIMIUM EIGEN)

Model	Hypotheses CE	Eigen Value	Maximum Statistics	Critical Value 5%	Prob.	Remark
1	$r \leq 0$	0.762348	47.41933	33.87687	0.0007	Significant
	$r \leq 1$	0.537968	25.47999	27.58434	0.0907	NotSignificant
ROI	$r \leq 2$	0.199371	7.337791	14.26460	0.4500	Not Significant
	$r \leq 3$	0.160920	5.789812	3.841466	0.0161	Significant
2	$r \leq 0$	0.802342	53.50015	33.87687	0.0001	Significant
	$r \leq 1$	0.674833	37.07277	27.58434	0.0023	Significant
ROA	$r \leq 2$	0.308893	12.19219	14.26460	0.1036	Not Significant
	$r \leq 3$	0.018453	0.614634	3.841466	0.4330	Not Significant
3	$r \leq 0$	0.756181	46.57390	33.87687	0.0009	Significant
	$r \leq 1$	0.541425	25.72783	27.58434	0.0848	Not Significant
ROE	$r \leq 2$	0.171969	6.227246	14.26460	0.5842	Not Significant
	$r \leq 3$	0.049558	1.677320	3.841466	0.1953	Not Significant

Source: Author's computation from E-view

Table 5 above presents the results of co-integration test using the maximum Eigen. The result indicates that there are two co-integrating equations in Model I, two co-integrating equations in

Model II and one co-integrating equation in Model III. This implies that, there is long run relationship that exists between the dependent and the independent variables in the models.

Table 6 Normalized Cointegration Equations

Model	Variables	Co-efficient	Std Error	Nature of Relationship	Remark
1	ROI	1.000000			
	DEBT_TC	76.69073	18.7127	Positive	Expected
ROI	EQC_TC	-19.89718	3.47830	Negative	Not Expected
	PFC_TC	-31.04064	3.38704	Negative	Not Expected
2	EQP	1.000000			
	DEBT_TC	0.640874	5.10344	Positive	Expected
EQP	EQC_TC	3.38704	0.99095	Positive	Expected
	PFC_TC	-1.275814	0.94023	Negative	Not Expected
3	EPS	1.000000			
	DEBT_TC	0.519967	5.82750	positive	Expected
EPS	EQC_TC	-5.487953	1.15512	Negative	Not Expected
	PFC_TC	0.986189	1.08578	positive	Expected

Source: Author's computation from E-view

Model I proved that in the long-run, debt capital have positive relationship with ROI while Equity and preference share capital have negative relationship. A unit increase will increase and reduce ROI by 76.6%, -31% and 19.8%.

Model III proved that debt and Equity Capital will add value to equity prices while preference share capital subtracted value of equity prices of the commercial banks. A unit increase will lead to 0.6% and 3.3% increase and 1.2% decrease.

Model III indicates that debt capital and preference share capital will enhance Earnings per Share while Equity Capital will affect negatively. It proved 0.5% and 0.9% increase while Equity Capital will reduce Earnings per Share by 5.4%. The positive effect of the variables confirms the expected results while the negative effect is contrary to expectation.

Table 7: Presentation of Pair wise Granger Causality Test

Model I ROI	Null Hypotheses	Obs	F-Statistics	Prob.	Decision
	DEBT_TC → ROI	33	2.46323	0.1034	Accept H_0
	ROI → DEBT_TC	33	8.86801	0.0010	Reject H_0
	EQC_TC → ROI	33	4.68363	0.0176	Reject H_0
	ROI → EQC_TC	33	16.4246	0.0000	Reject H_0
	PTC_TC → ROI	33	0.40977	0.6677	Accept H_0
	ROI → PFC_TC	33	5.82063	0.0077	Reject H_0
Model II EQP					
	DEBT_TC → EQP	33	27.0650	0.0000	Reject H_0
	EQP → DEBT_TC	33	6.62708	0.0044	Reject H_0
	EQC_TC → EQP	33	15.9878	0.0000	Reject H_0
	EQP → EQC_TC	33	1.46856	0.2475	Accept H_0
	PTC_TC → EQP	33	2.09045	0.1425	Accept H_0

	EQP PTC_TC	33	0.34289	0.7127	Accept H_0
Model III EPS					
	DEBT_TC ⟶ EPS	33	0.52257	0.5987	Accept H_0
	EPS ⟶ DEBT_TC	33	3.26053	0.0533	Reject H_0
	EQC ⟶ EPS	33	0.27324	0.7629	Accept H_0
	EPS ⟶ EQC	33	0.14464	0.8660	Accept H_0
	PFC_TC ⟶ EPS	33	0.69301	0.5084	Accept H_0
	EPS ⟶ PFC_TC	33	9.35025	0.0016	Reject H_0

Source: Author's Computation from E-view.

The table above present results of the Granger Causality Test Model I show that, there is a unidirectional relationship from ROI to Debt Capital. Bi-directional relationship from equity capital ROI and ROI to Equity capital and a bi-directional relationship from ROI to preference share capital.

Model II reveals a bi-directional relationship between Debt capital to equity price and equity price to debt capital, unidirectional relationship between preference share capital equity prices. Model III indicates bi-directional causal relationship between Earnings per share to Debt capital, no causal relationship between equity capital and Earnings per share and a bi-directional relationship between Earnings and preference share capital.

Table 8: Vector Error Correction Result

Model I ROI	Variable	Adjusted Parameter	F-Statistics	Speed of Adj. %
	ROI	-0.96311	-4.28563	22.6
	DEBT_TC	-5.443684	-1.31580	415.2
	EQC_TC	0.773806	0.82929	92.8
	PTC_TC	2.660183	1.53093	173
Model II EQP	EQP	-0.213362	1.23207	17.1
	DEBT_TC	-12.78096	-2.45593	521.6
	EQC_TC	2.095898	1.61209	129.6
	PFC_TC	-1.268324	-4.602216	27.5
Model III EPS	EQP	0.297633	-0.65985	45.1
	DEBT_TC	-1.497779	-1.96265	76.3
	EQC_TC	-0.253814	-0.29249	86.6
	PFC_TC	-0.709077	-1.14320	62.2

Source: Author's Computation from E-view.

Model I shows that Debt Capital has the highest speed of adjusted follows by preference share capital. Model II also shows Debt Capital with highest speed while Model III shows Equity Capital with highest speed of adjustment.

CONCLUSION AND RECOMMENDATIONS

This study as motivated to investigate the effect of capital structure on the share holders value of commercial banks in Nigeria using multi-variable time series data from 1981 – 2014. From the model summary, Model I shows that 79.4% variation on Return on Investment, the F-

statistics of 29.00541 and the probability proved the significant of the model. Model II reveal that 48.4 variations in equity prices of the commercial banks can be traced to variation in the capital structure with the f-statistics of 7.047489 and the probability of 0.000399 while model III proved that the variables can only explained 11.1% variation on Earnings per share with the F-statistics of 0.943961 and the probability of 0.45222.3. The study indicates that capital structure is relevant to the commercial banks and determines the shareholders value.

It shows that capital structure is relevant to the commercial banks and determines the shareholders value. It also shows that capital structure affect more on Return on Investment than Equity prices and Earnings per share. Considering the unattainable assumptions of the Miller and Modigliani, this study conclude that capital have significant relationship with shareholders value of commercial banks in Nigeria. Therefore, we make the following recommendations:

1. That the commercial banks should have more equity capital in the capital structure to enhance the performance and the shareholders value.
2. Management should device measures of servicing debt capital at cheaper rate to enhance shareholder value.
3. There is need to formulate policies of that will enhance efficient management of debt capital among Nigerian commercial banks.
4. The operational efficiency of the capital should be deepened to enhance easy source of equity capital for the commercial banks.
5. Preference share capital should be integrated with the profitability objective of the banking institutions.

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