Capital Structure and Share Price: Empirical Evidence From Listed Deposit Money Banks (DMB) in Nigeria

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Abstract— The study employed panel regression method of analysis to evaluate the impact of capital structure on share price of 15 listed Deposit Money Bank (DMB) in Nigeria by extracting data on capital structure for the period 2006 to 2016, a period of ten years. Hausman test was utilized to determine the suitable model between Fixed and Random model, which are the two main methods that are appropriate for analysing panel data. The test confirmed the appropriateness of the Fixed Effect Model. The finding shows that capital structure has a negative and statistically significant impact on share price of 15 listed Deposit Money Bank in Nigeria. The study recommended that listed DMB in Nigeria should make an effort to be rational when raising capital and listed DMB in Nigeria should attempt and make the most of retain profit for its financing.

Index Terms— Capital Structure, Share Price, Financing, Decision.

I. INTRODUCTION

Capital structure decisions are basic for the growth of Deposit Money Bank (DMB) in Nigeria. Financial managers are given the autonomy of picking the components of their capital structure as long as they boost the worth of the share price at the same time attaining some of the core objectives and goals of firms. Some of these include maximization of the company’s value or share price. Globally, managers make effort to discover a blend of capital structure with the appropriate gearing ratio or proportion. Huber (2011) argued that excessive utilization of debt financing might lead to excessively utilization of profit to pay off long term obligations, which fundamentally brings down the investor's interest. Again, the overreliance or dependent on equity restricts the amount of capital a firm can accumulate for its development. In this perspective, financial managers should find the trade-off between the use of debt and equity and the effect it has on the share price. The deliberation on the effect of an organization's capital structure on the value of the firm has been of great importance since the 1950s. In 1958, the Miller and Modigliani (MM) theory proposed that the financial leverage proportion has no impact at all on the value of a firm given that firm works in a perfect market (Huber, 2011). The MM subsequent article in 1963 showed that, in the presence of company tax, the financial leverage proportion affects the value of a firm on the grounds that the rate of return of stock increments of financial leverage proportion. Also, the 1963 MM suggested that a levered firm enjoys the advantage of interest rate, payment deduction dissimilar to the organizations that pick to utilize equity since the dividend payment, for this situation, are mandatory. Organizations have been utilizing debt in their capital structure as it lessens the cost of capital and prompts the increase in profit of a firm. Utilizing this financing system, make an organization to possess the capacity to give their investors more incentive as debt gives a good option to capital. Be that as it may, financial managers should take control over the utilization of debt financing with the aim of having a soundness credit worth. Financial managers’ makes effort that best fit the utilization of debt financing to maximize the value of the firm share price. A firm has the freedom of picking the capital structure that would be best in enhancing the value of its share price. In any case, the decision of financing using debt has focal points and drawbacks. Managers depend on finding an ideal mix of the appropriate proportion of debt financing as the source of the company's capital. Settling on this decision in itself is a challenge for financial managers, particularly in budding economies like Nigeria. The utilization of overabundance use leverage puts a firm at a risk financial in the event that it can't pay the debts according to the agreement. For this situation, the organization faces a danger of liquidation (Guerard & Schwartz, 2007). Existing Nigerian researches concentrated on other variables as the dependent variable such as Return on Asset, Return on Equity and with dearth of research that cover the relationship between capital structure and share price of listed Deposit Money Banks in Nigeria is the motivation factors for this research. The objective of the study is to examine the impact of debt, equity and gearing ratio financing on share price of listed DMB in Nigeria. To accomplish this target, the study hypothesized that debt, equity and gearing ratio financing has no significant influence on share price of listed Deposit Money Banks in Nigeria. A study of this magnitude will serves as the basic planning tool for financial managers. The link between capital structure and share price cannot disregarded therefore the improvement of share price of listed Deposit Money Banks in Nigeria is crucial for the long-term survival of listed Deposit Money Banks in Nigeria. Thus, it is imperative to evaluate the link between capital structure and share price of listed Deposit Money Banks in Nigeria in order to make a sound capital structure choice. The paper is planned into five sections, with this portion being the introduction. Section two deals with the review of extant
related studies; the next section three is devoted to the methodology of the study. Segment four present data analysis and section five concludes the study by drawing conclusion on the discoveries and afterward the suggestions.

II. LITERATURE REVIEW

There are past studies conducted in various nations which are identified with the point of this research. With a specific end goal is to show the research gap and justify the significance of this study. Salawu (2009) explored the effect of capital structure on profitability of listed DMB in Nigeria. The investigation analyst utilized secondary data for the period 1990 to 2004 which was extracted from the Annual Report of 50 non-money related recorded firms and Fact Books issued by the Nigerian Stock Exchange. The investigation outcome point out that profitability gives a positive connection with long-term debt.

Ogbulu and Emeni (2012) considered the impact of capital structure on an organization's value. The samples of the study were 124 organizations listed on the Nigerian Stock Exchange (NSE) for the term 2007. The investigation found that in a budding economy like Nigeria, value capital as a constituent of the capital structure is unimportant to firm value, albeit Long-term obligation was found to be the major contributing element to company's value. Oboh, Isa, and Adebayo (2012) looked at the impact of capital structure on financial performance. In the research focused on 39, non-monetary listed organizations on the Nigerian Stock Exchange for the time of 2005 to 2009 utilized as the sample in the study. The results from the exploration presented a noteworthy and positive affiliation concerning market values and their debt or obligation and equity value while there is a negative relationship total debt to total capital employed and market value, moreover firm size emphatically impact market value.

Yusuf, Onafalujo, Idowu and Soyebo (2014) analyzed the correlation between capital structure and profitability with an emphasis on conglomerate, consumer goods companies, and financial services organizations listed on the Nigerian Stock Exchange. The study inferred that a blend of the organizations' leverage and assets resources at an appropriate proportion will be viewed as an appropriate capital structure for the organizations. Babalola (2014) investigated the effect of corporate capital structure and its market estimated worth in Nigeria. The data for the investigation were extricated from non-financial listed organizations for the time of 2005 to 2009. The discoveries from the exploration uncovered that there is a significant and affirmative relationship between non-financial organizations 'market values and their debt or obligation-equity proportions, an adverse relationship between an organization's company's total debt/total capital proportion and its market worth, firm size decidedly impact market value. The result of the study demonstrated that organizations' leverage positively impacts market value.

Yahaya and Andow (2015) considered the association between capital structure and financial performance of listed firms in Nigeria for the period 2009 to 2013. The study built up that the relationship between financial leverage and financial performance is unfavorable; thus, this exploration leaves a gigantic gap by dismissing a superior and strong tool of investigation, for example, panel regression which will give better outcome. Adesina, Nwidobie and Adesina (2015) sought to investigate the impact of post- consolidation capital structure on financial performance of Nigeria listed DMB banks. The result of the investigation uncovered that that capital structure has a substantial affirmative connection with financial performance of Nigeria listed DMB banks.

Idris and Bala (2015) investigated firms' attributes and stock returns of listed Nigerian Food and Beverages Firms on Nigeria Stock Exchange. The study employed correlational research design and ex-post facto. From a population of 21 Food and Beverages Firms a sample size of 9 firms was drawn and the data collected was subjected GLS regression to validate the explore hypothesis. The result revealed that that organization's debt/equity proportion and income per share proportion obviously and measurably have an effect on firm stock returns. Adenugba, Ige and Kesinro, (2016) decided to measure the relationship between financial leverage and firms' value/worth of listed firms on the Nigerian Stock Exchange. A sample of five (5) firms was drawn from the population from 2007 to 2012. The data of the investigation were sourced from yearly reports of sampled firms. The data extracted were subjected to Ordinary Least Square (OLS) regression which was utilized to confirm the research hypotheses. The study found that there is a significant connection between's financial leverage and firms' value other than that investigation demonstrated that financial leverage affects firms' value.

Ude (2015) determined the impact of debt financing on company's profitability, maximum assets utilization, earnings per-share, and value of Nigerian firms. The number of population in this investigation is two hundred and seventy six (276) listed firms; though thirty (30) firms were chosen through stratified sampling method technique (barring financial service industry) which served as the sample estimate. The general finding of this examination tends to hold up the trade-off theory of firm’s financial structure, which proposes that the trade off between debt obligation and equity value must be with the end goal that the ideal financial structure must make value on a very basic level for the firm and additionally the owners of the firm. Nwude, Itiri, Agbadua and Udeh (2016) explored of the effect of debt obligation structure on the performance of Nigerian listed firms. The examination infers that debt obligation structure contribute contrarily to performance of Nigerian listed firms; that concur with pecking order theory. This study is motivated by or fuelled by the lack or dearth of research that examine the influence of capital structure on share price of listed DMB in Nigeria. This investigation, subsequently, is an endeavour to address this gap of information on listed DMB in Nigeria. At that point, the goal of this study is to quantify or measure the influence of capital structure on share price of listed DMB in Nigeria.

This study is pinned on Pecking Order Theory to support this work since the theory is connected with a positive relationship between share and capital structure. For the reason that the theory proposes that organizations incline toward internal source of financing before utilizing external sources of financing. The pecking order theory inclination is the one that is least uncertain to the one that is most unsafe that occur because of asymmetric information between
corporate insiders and less well-informed market participants.

III. METHODOLOGY

The correlational research method was adopted for this research to examine the influence of capital structure on share price of listed DMB in Nigeria. This is on the grounds that the study looks to investigate the connection between capital structure and share price of listed DMB in Nigeria. The data for this study was extracted from secondary sources which is the annual reports of all the listed DMB in Nigeria as at 31 December 2016. The total number of listed DMB in Nigeria as at 31st was fifteen (15) and census was used as the sample which makes the sample size for the study as 15 listed DMB in Nigeria. Panel regression was utilized for the research using STATA 13.

A. Model Specification

With a specific end goal to determine the influence of capital structure on share price of listed DMB in Nigeria, a linear model was constructed. The model captured contribution of capital structure (debt, equity and gearing ratio) on share price of listed DMB in Nigeria. The panel regression model is shown as underneath:

\[ SP_{i,t} = \beta_0 + \beta_1 DR_{i,t} + \beta_2 EQTY_{i,t} + \beta_3 GR_{i,t} + \epsilon_{i,t} \]

Where:

- \( DR = \) Debt Ratio.
- \( EQTY_{i,t} = \) Equity of insurance firms \( i \) in period \( t \).
- \( GR_{i,t} = \) Gearing Ratio of insurance firms \( i \) in period \( t \).
- \( \epsilon_{i,t} = \) component unobserved error term.
- \( \beta_0 = \) constant term
- \( \beta_1, \beta_2, \) and \( \beta_3 = \) are sloped to be estimated.
- \( i = \) banks identifier
- \( t = \) time variable

IV. DATA ANALYSIS

Table 4.1 Descriptive Statistics of the Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR</td>
<td>165</td>
<td>.52438</td>
<td>.52438</td>
<td>.4691</td>
<td>2.8163</td>
</tr>
<tr>
<td>EQTY</td>
<td>165</td>
<td>.493946</td>
<td>.493946</td>
<td>-1.8163</td>
<td>1</td>
</tr>
<tr>
<td>GR</td>
<td>165</td>
<td>1.350386</td>
<td>1.350386</td>
<td>-2.397429</td>
<td>24.38072</td>
</tr>
<tr>
<td>SP</td>
<td>165</td>
<td>1.244476</td>
<td>1.244476</td>
<td>.001616</td>
<td>14.47178</td>
</tr>
</tbody>
</table>

Source: Author’s computation using STATA 13

Table 4.2 The pairwise correlation among the Variables

<table>
<thead>
<tr>
<th></th>
<th>DR</th>
<th>EQTY</th>
<th>GR</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQTY</td>
<td>-0.9149</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GR</td>
<td>0.0842</td>
<td>-0.1032</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>-0.2999</td>
<td>0.4031</td>
<td>-0.2057</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Author’s computation using STATA 13

Table 4.3 Combined Results of Pooled, Fixed, and Random models

<table>
<thead>
<tr>
<th>Variables</th>
<th>Apriori Expectation</th>
<th>Panel Pooled coefficients</th>
<th>Panel Fixed coefficients</th>
<th>Panel Random coefficient</th>
<th>C ( P-value )</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR_{i,t}</td>
<td>+</td>
<td>1.81</td>
<td>0.085</td>
<td>-3.56</td>
<td>0.006</td>
</tr>
<tr>
<td>EQTY_{i,t}</td>
<td>+</td>
<td>3.19</td>
<td>0.002</td>
<td>-2.83</td>
<td>0.038</td>
</tr>
<tr>
<td>GR_{i,t}</td>
<td>+</td>
<td>-0.09</td>
<td>0.096</td>
<td>-0.02</td>
<td>0.768</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>-1.16</td>
<td>0.266</td>
<td>4.53</td>
<td>0.001</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.22</td>
<td></td>
<td>0.0049</td>
<td></td>
<td>0.12</td>
</tr>
<tr>
<td>N</td>
<td>165</td>
<td></td>
<td>165</td>
<td></td>
<td>165</td>
</tr>
<tr>
<td>F</td>
<td>7.96</td>
<td></td>
<td>0.0001</td>
<td>3.10</td>
<td>0.0321</td>
</tr>
<tr>
<td>Hausman Test</td>
<td></td>
<td>19.67</td>
<td></td>
<td></td>
<td>P-value</td>
</tr>
</tbody>
</table>

Source: Author’s computation using STATA 13
To discover the connection between the dependent variable and the independent one, we conducted a regression analysis. The results indicate that the independent variables have a significant impact on the dependent variable. For instance, we found that the coefficient of (DR) is not positive/negative (-0.356) having a likelihood value (0.006). Since the p-value is not more than the critical value of 5% (0.05), we can dismiss the null hypothesis that debt (DR) does not significantly affect share price of listed DMB in Nigeria.

**H03:** DEBT has no significant impact on share price.

From table 3 panel B, the coefficient of debt (DR) is not positive/negative (-3.56) having a likelihood value of (0.006). Since the p-value is not more than the critical value of 5% (0.05), we can dismiss the hypothesis that debt (DR) does not significantly affect share price of listed DMB in Nigeria.

**H04:** Equity has no significant impact on share price.

From table 3 panel B as well, the coefficient of equity (EQUITY) is not positive/negative (-2.83) having a likelihood value/estimation of (0.038). In view of the fact that the p-value is not as much as the critical value of 5% (0.05), we can dismiss the hypothesis that equity (EQUITY) does not considerably affect share price of listed DMB in Nigeria.

**H05:** Gearing ratio has no significant impact on share price.

Finally, from table 3 panel B, the coefficient of gearing proportion (GR) is not positive/negative (-0.02) having a likelihood value or estimation of (0.768). Since the p-value is more noteworthy than the basic or the critical value/estimation of 5% (0.05), we can acknowledge the null hypothesis that gearing ratio (GR) does not affect share price of listed DMB in Nigeria and rather reason that it has no any effect. The negative coefficient, notwithstanding, nullifies the apriori expectation of a positive coefficient. By implication, if gearing proportion or ratio percentage increase by 1%, share price value lessens by around 0.02%.

As per expectation, gearing proportion ought to have possessed the capacity to advance the growth of value of share price of DMB in Nigeria.

**B. Discussion of the Findings**

The regression after-effect of the analysis demonstrates that capital structure has a huge negative effect on share price value of listed DMB in Nigeria. This outcome is in accordance with different discoveries like Atta-Doku (2009); Chinaemerem, and Anthony (2012); Pouraghajian, Malekian, Emamgholipour, Lotfollahpour, and Bagheri (2012); Salim and Yadav (2012); Mwaura (2013); Tharmila and Arulselv (2013); Younus, Ishfaq, Usman, and Azeem (2014); Rajha and Alslehat (2014); Khan, Naz, Khan, and Ahmad (2013); Mwangi and Birundo (2015) empirical researches uncovered that capital structure has negative impact on share price value of listed DMB in Nigeria.

As opposed to these perspectives, other studies empirical outcome uncovered that company's capital structure has an essentially positive effect on share price value of listed DMB in Nigeria. For instance, Raheman, Zulfiqar and Mustafa (2007); Salehi and Biglar (2009); Pouraghajian, Malekian, Emamgholipour, Lotfollahpour, and Bagheri (2012); Mwaura (2013); Mujahid and Akhtar (2014); Idoke, Adeleke, Ogunlowore, Ashogbon (2014); AbuTawahina (2015).

**V. CONCLUSION AND RECOMMENDATION**

The listed DMB in Nigeria is unarguably imperative to the growth and development of all parts of an economy and along these lines, the coveted for the general advancement of a nation economy requires that the segment stays solid and sound. In this way one noteworthy concern that could undermine the vital significance of the segment is the issue of capital structure; in such manner, capital structure is pivotal for estimation of listed DMB in Nigeria. The study looks at the capital structure and share price of listed DMB in Nigeria. The research, in any case, finds that capital structure has a huge negative relationship and influence on share price value listed DMB in Nigeria.

From the regression after-effect of the analysis, the enormous negative connection between capital structure and on share price value listed DMB in Nigeria might be because of high-loan interest rate and Nigeria economic situation, it is thusly suggested that listed DMB in Nigeria should make an effort to be rational when raising capital and listed DMB in Nigeria should attempt and make the most of retain profit for its financing.

**REFERENCES**


