THE EFFECTS OF FINANCING RISK ON THE VALUE OF FIRM AND PROFITABILITY: EVIDENCE FROM NIGERIAN COMMERCIAL BANKS

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ABSTRACT

This study is designed to address the critical issues of financing risk in the banking industry. The data from sixteen selected commercial banks’ audited financial reports from 2009 to 2015 was used, making up to 112 observations. The panel data approach was used in the study for the analytical models. The market-based and accounting-based measure was used to proxy firm performance while financing risk was proxied by the Short-term debt, Long-term debt and Total debt ratio. The controlled variables used in this study include bank size and the GDP growth rate. Based on the random effect analysis in the models, the TDE ratio and GDP had a negative significant effect on firm value, suggesting that improvement in the TDE and GDP would increase firm value. The LTD ratio had a positive significant effect on firm value. The STD, LTD and TDE all impacted negatively on the banks’ return on assets. This suggested that a decrease in STD, LTD and TDE would lead to an increase in banks’ return on asset. The STD, LTD and GDP had a negative and significant effect on the banks’ net interest margin. The firm size had no impact on either the firm value or profitability measure used in the study. It was observed that the GDP played an important role in the performance of the commercial banks in the study. Hence, this paper suggests that further study can explore the effects of firm characteristics on firm value by exploring non-financial firms and/or a cross-country study.

1. INTRODUCTION

The modern corporate era is saddled with tough competition and the dynamic environment in which firms operate demands optimal financial decisions in order to survive. The financial institutions have become interconnected and their complex financial functions coupled with the surrounding environmental factors permits firms to be enormously concerned with corporate, operational and social issues today. These factors often threaten their decision making, business replicas and their responsiveness to risk, causing new risks from additional financial obligations to emerge. Financing risk explains how firms finance activities either by issuing debt or equity (Peter,
In reality, financial managers play a crucial role in deciding the debt and equity level and choosing an optimal capital structure is the sole objective i.e. the decisive choice that minimizes its capital costs and maximizes the firm value (Mohammad and Jaafer, 2012; Habib et al., 2016).

Corporate firms rely on debts as opposed to equity mainly because of the tax deductibility of interest payments, thereby triggering an increase in bankruptcy risk and an increase in debt to equity ratios that gives rise to debt preconception (Mooij, 2011). Review of the literature have revealed that these factors give rise to inequities, distortion in economies and threaten the public revenue. Ross et al. (2004) asserted in his study that the expectations of corporate investors is capital appreciation. Investors are keen on realizing a positive return on their investments in the form of dividends, reflected by the constant rise in share price. Therefore, the nexus between financing risk, firm value and profitability has become a strategic issue and the objective of the corporate organization is to maximize the market value of shares.

The direction and intensity of the relationship between financing risk and firm value garnered contradictory findings in the empirical literature. Some studies have pointed to the existence of a positive relationship (Berger and Patti, 2006; Akhtar et al., 2016). There have been arguments by other researchers who support the existence of a negative relationship (Abor, 2005; Habib et al., 2016). As expected, some researchers have claim the existence of no relationship between the core financing leverage (Ebaid, 2009).

The most consistent result from the diversity of empirical and explicit studies on capital structure and financial performance in recent years is a single common conclusion: that its research results have been largely inconsistent. Therefore, this study examined the effects of financing risk on firm value and bank profitability.

2. LITERATURE REVIEW

2.1. Theoretical Background and Integration

Modigliani and Miller (1958) work emerged as a mystifying issue in corporate finance and accounting literature on capital structure theory and its association with firm value and profitability. What was interesting were the presumptions in Modigliani and Miller (1958) work who positioned that in the absence of taxes and transaction cost, the cost of capital and the value of the firm does not change regardless of a change in leverage. It was further asserted that the value of firm is independent of how it manages risk. The concept of arbitrage was the fundamental idea used and from the firm’s shareholder point of view, capital-markets imperfections of some sort such as cost of financial distress or differential tax treatment across instruments or institutions only permitted the feasibility of managing corporate risk. However, this limiting assumptions was relaxed by subsequent research asserting that capital structure was definitely not irrelevant, but indeed affected firm value (Jia and Chen, 2008).

There are few other assumptions about debt financing affirming the influence of debt on corporate profitability: under corporate and personal taxes, firms possibly enjoy a tax shield in using debt financing as a result of the tax deductibility of the interest on debt. Miller (1977) stated that debt owners are subjected to personal taxes and the accumulation of the required level of interest payments mitigates the corporate tax advantages of firms. The argument for bankruptcy cost is that both bondholders and stockholders would suffer losses once the firm faced financial distress as the assets would be sold at less than the market value (Jia and Chen, 2008).

The position of Froster (1996) was that the upsurge in debt financing usage by firms ultimately raises the likelihood of default on its interest obligations. The financial condition of the firm is weakened with incessant reliance on debt financing. Signaling theory is anchored on creditworthiness between firms issuing debt and equity financing. Firms are perceived to signal more favorable prospects as issuing debt to finance projects indicates anticipation of higher returns, while firms issuing equity financing are perceived not to have sufficient credit worthiness to obtain debt financing.

The argument in the pecking order theory is that managerial preferences move towards internal financing not external financing which is associated with flotation costs and signaling effects (Fama and French, 2005).
theory is that debt financing will be favored to equity-financing by firms in their capital structure. The conflict of interest or separation of the agent (management) and the principal (bondholders and stockholders) results in an agency problem. By investing in risky projects, managers are likely prone to act in the stockholders’ interest at the expense of bondholders (Mohammad and Jaafer, 2012). The study of Harris and Raviv (1991) and Akhtar et al. (2016) posited that the management might as a result of conflict maximize its own value at the cost of the owners. Hence, the high rate of bankruptcy risk and inequities can be reduced in developing countries if there is a consequential shift from debt-financing to equity-financing which could lead to a significant increases in the tax revenues of government as well (Akhtar et al., 2016).

2.2. Empirical Review

Numerous researchers were inspired by the seminal work of Modigliani and Miller despite its unrealistic assumption. The analysis and the search for the validity of an optimal financing decision has been the sole objective of researchers globally; and by definition, an optimal capital structure is when the weighted average cost of capital is at minimum and the value of the firm is been maximized (Rehman et al., 2012). Numerous empirical studies conducted have found positive, negative or no relationship between firm performance and capital structure and most have produced mixed results.

2.3. The Nexus between Debt Financing and Firm Value

Numerous studies such as Bokhtiar et al. (2014); Varun (2014); Pathak (2011) and Onaolapo and Kajola (2010) found a negative and significant link between the level of debt and firm performance with the findings different from many studies conducted in the western economies, but nonetheless showing consistency with some of the studies done in Asian countries. Interestingly, developing countries seems to exhibit a high cost of borrowing in comparison to the developed economies which is possibly one of the significant reasons for this conflicting result. There was no significant effect of efficiency on leverage in the study of Khan (2012) which was consistent with the study of Jensen and Meckling (1976) in his agency cost model which revealed evidence of non-linearity in the association between the type of ownership with capital structure and firm performance.

The study of Roden and Lewellen (1995) revealed a positive and significant association between profitability and capital structure focusing on 48 US firms from 1981 to 1990. Related findings were found in the study of Ghosh et al. (2000) and Champion (1999). Abor (2005) in his study measured capital structure by STD and TD in relationship to firm performance in the Ghanaian firms and reported a positive relationship from 1998 to 2002. A similar study was investigated by Arbabiyan and Safari (2009) in Iran with a total of 100 listed firms from 2001 to 2007 and the study established that short-term debts and total debts have a positive relationship with profitability (ROE) and found a negative link between long-term debts and (ROE).

Salim and Yadav (2012) in his study focused on capital structure and firm performance of Malaysian listed companies from 1995 to 2011. Six sub-sectors were examined which included industrial products, consumer products, property, trading services, plantation, and construction. Market-based measures and accounting-based measures of financial performance were used (i.e. ROA, ROE, EPS & Tobin’s Q). The empirical results showed that capital structure variables (especially TD & STD) negatively impacted on ROE. Conversely, LTD & TD had a negative and significant influence on firm performance as measured by ROA. The findings showed that there was a positive and strong significant association between Tobin Q and STD, LTD and TD.

A study by Zeitun and Tian (2007) used a panel data sample representing 167 Jordanian companies from 1989 to 2003. The empirical result which used both the accounting and markets measures revealed a negative and significant impact of capital structure on firm performance measures. Pratheepkanth (2011) in his study also analyzed companies in Sri Lanka from 2005 to 2009 with a specific focus on capital structure and its impact on the financial performance capacity. Findings of the study showed a negative association between the constructs.
Saedi and Mahmoodi (2011) conducted a study on 320 listed firms on the Tehran Stock Exchange from 2002 to 2009 which examined the nexus between capital structure and firm performance. The study indicated that the performance measures, proxied by EPS and Tobin’s Q were positively and significantly affected by capital structure. Contrarily, the study reported an inverse relationship between the capital structure and ROA, and also found no significant link with ROE. Further review revealed that insolvency probably emerged out of heavy reliance on debts. Firms should be cautioned against acquiring debt beyond their targeted levels as higher debt carries higher bankruptcy costs (Robichek and Myers, 1966). Therefore, the amount of debt embedded in a firm’s capital structure provides vital information about its future financial performance. The study of Ross et al. (2004) posited that the future of a firm heavily relied on either debt increase which carries good news or debt decrease which carries bad news.

The recent study of Peter (2017) examined the relationship between the capital structure and the profitability of listed energy and petroleum companies in Kenya from 2012 to 2017 by establishing the relationship between long-term and short-term debts with profitability and its effects. The study established a strong positive relationship between short-term debt and ROA, an average negative relationship between long-term debts and ROA and a weak positive relationship between total debt and ROA. Both the short-term and long-term debts were found to have no significant effect on ROA.

Numerous empirical research on developed countries have provided mixed and contradictory evidence regarding the nexus between capital structure and financial performance, while there have been few studies in emerging economies which have empirically investigated this important relationship. The perspective of this empirical study focused on Nigeria and prolifically and extensively examined the impact of capital structure on firm performance. A survey into debts embedded in the firm’s capital structure became important for fewer reasons, not only to firms but to the society at large (Akhtar et al., 2016).

3. RESEARCH METHODOLOGY

3.1. Data and Research Method

A balanced panel dataset was used in this of sixteen commercial banks from 2009 to 2015 making up 112 observations. The sixteen selected commercial banks were chosen according to the availability of data during the period of study. The observed variables in the study were extracted from the commercial banks; annual financial reports and financial statements.

3.2. Definition and Measurement of Variables

Firm performance measurement in corporate finance literature encompasses an array of different measures including accounting-based measurement derived from firms’ financial statements such as ROA and NIM (Abor, 2005; Ebaid, 2009; Hamadi and Awdeh, 2012; Tarus et al., 2012; Dumičić and Rizdac, 2013; Ongore and Kusa, 2013). The two most common accounting-based performance measures were used in the study to capture firm performance (profitability): NIM which represents the ratio of net interest income to average interest earning assets; and ROA which represents the ratio of net income to total assets.

This study used the enterprise value which is generally used in identifying undervalued firms and is a robust market value proxy (Liifland, 2011) because it captures the real market value of firm as a whole business and it is an economic measure useful for the valuation of firm (Bhullar and Bhatnagar, 2013). Enterprise value takes into consideration debt obligations, non-controlling minority interest and excess cash in valuing a firm. Thus, this study used a unique ratio of enterprise value-to-operating performance (EV/EBITDA) as a measure of firm value. This infers that enterprise value divided by earnings before interest, taxes, depreciation and amortization (EV/EBITDA) represents the proxy for firm value. Enterprise value was measured as equity value + total debt– cash & cash equivalents + preferred stock + minority interest.
3.2.1. Financial Leverage

Prior studies such as Abor (2005); Saedi and Mahmoodi (2011); Ebaid (2009); Salim and Yadav (2012); Akhtar et al. (2016); Peter (2017) measured financial leverage in their study mainly by three key financial ratios, ratio of short-term debt to total assets (STD), long-term debt to total asset ratio (LTD) and ratio of total-debt to total equity (TDE). The debt to equity ratio indicates how firms finance their operations using some amount of debt and equity.

3.2.2. Control Variable

This study controlled for other factors that might affect firm performance by including size as a variable in the model which accounted for the inconsistencies in the firm’s operating environment. The studies of Frank and Goyal (2003); Jermias (2008); Athanasoglou et al. (2008); Ebaid (2009); Tafri et al. (2009); Akhtar et al. (2010); Tafri et al. (2011) proposed that it was possible that bigger firms might have more capabilities and capacity, having significant influence on performance. Therefore, the firm size was captured using the natural log of total assets of the firm. The study also considered the effect of economic environment on the firm value and profitability. This was often controlled by using the growth in GDP as the macroeconomic variable (Anbar and Alper, 2011; Dumičić and Rizdak, 2013).

3.3. Model Specification

The following regression models tested the nexus between financing risk and financial performance:

\[ FV_{it} = \beta_0 + \beta_1 STD_{it} + \beta_2 LTD_{it} + \beta_3 TDE_{it} + \beta_4 GDP_{it} + \beta_5 SIZE_{it} + \epsilon_{it} \] (1)

\[ ROA_{it} = \beta_0 + \beta_1 STD_{it} + \beta_2 LTD_{it} + \beta_3 TDE_{it} + \beta_4 GDP_{it} + \beta_5 SIZE_{it} + \epsilon_{it} \] (2)

\[ NIM_{it} = \beta_0 + \beta_1 STD_{it} + \beta_2 LTD_{it} + \beta_3 TDE_{it} + \beta_4 GDP_{it} + \beta_5 SIZE_{it} + \epsilon_{it} \] (3)

The Equation 1 represented the model with the long-term performance as a dependent variable while Equation 2 and 3 denoted the models with the short-term performance as a dependent variable.

4. EMPIRICAL ANALYSIS AND FINDINGS

4.1. Descriptive Statistics

The study summarized the descriptive statistics of the variables in Table 1 below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV</td>
<td>112</td>
<td>0.0318</td>
<td>0.2618</td>
<td>0.097</td>
<td>0.0465</td>
</tr>
<tr>
<td>ROA</td>
<td>112</td>
<td>-0.3109</td>
<td>0.1396</td>
<td>0.0117</td>
<td>0.0385</td>
</tr>
<tr>
<td>NIM</td>
<td>112</td>
<td>0.0187</td>
<td>0.1499</td>
<td>0.0806</td>
<td>0.0313</td>
</tr>
<tr>
<td>STD</td>
<td>112</td>
<td>0.5840</td>
<td>0.9644</td>
<td>0.767</td>
<td>0.0639</td>
</tr>
<tr>
<td>LTD</td>
<td>112</td>
<td>0.0005</td>
<td>0.6151</td>
<td>0.0963</td>
<td>0.0774</td>
</tr>
<tr>
<td>TDE</td>
<td>112</td>
<td>2.3378</td>
<td>191.2097</td>
<td>8.565</td>
<td>17.7903</td>
</tr>
<tr>
<td>SIZE</td>
<td>112</td>
<td>0.1271</td>
<td>0.2169</td>
<td>0.1686</td>
<td>0.0315</td>
</tr>
<tr>
<td>GDP</td>
<td>112</td>
<td>-0.00069</td>
<td>0.0498</td>
<td>0.0268</td>
<td>0.0156</td>
</tr>
</tbody>
</table>

Note: FV = Firm value; ROA = return on asset; NIM = net interest margin; STD = short-term debt to total asset ratio; LTD = long-term debt to total asset ratio; TDE = total debt to equity ratio; SIZE = size of banks; GDP = growth of GDP.

The firm value (FV), the return on asset (ROA) and the net interest margin (NIM) had a mean of 0.097 (9%), 0.011 (1%) and 0.080 (8%) respectively. The implication was that the banks had a relatively low average with respect to their firm values, returns on asset and net interest margins. The variables also showed a minimum value of 3%, -31% and 1.87% and a maximum value of 26%, 14%, and 15% respectively. The short-term debt to total-asset
ratio showed an average of 76%, the long-term debt to total-asset ratio showed an average of 10% and the total-debt to total asset ratio showed an average of 85%. This implied that Nigerian commercial banks funded their assets mostly by using long-term debt and short-term debt. The statistics clearly showed that the commercial banks used about 76% of debt to finance their assets. This was evident in a sense that they were in a far riskier condition and there was an urgent call for banks to balance their financing decisions and to encourage investment in equity financing in order to increase the value of firms. The average size of Nigerian commercial banks was 17% approximately while the average GDP growth rate stood at 3% during the period of study.

4.2. Panel Unit Root Test and Diagnostic Test

The panel unit root test was conducted to check the stationary and/or the presence of unit root in the time series data to avoid spurious results. As shown in Table 2 below, the study used the ADF-Fisher with AIC criterion and the results indicated that the majority of the variables were stationary and significant at the 1st difference with the intercept only. Therefore, the model with intercept only was likely to give a better result. Further diagnostic testing using the variance inflation factor indicated that there was no multicollinearity among the variables. The absence of autocorrelation and heteroskedasticity was also confirmed using the Breusch-Pagan / Cook-Weisberg and Wooldridge tests.

<table>
<thead>
<tr>
<th>Var.</th>
<th>With Trend and Intercept Level</th>
<th>1st Diff</th>
<th>2nd Diff</th>
<th>I(d)</th>
<th>With Intercept only Level</th>
<th>1st Diff</th>
<th>2nd Diff</th>
<th>I(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV</td>
<td>1.91258</td>
<td>-3.20221</td>
<td>-2.5169</td>
<td>I(1)</td>
<td>2.69822</td>
<td>I(0)</td>
<td>4.6930</td>
<td>I(0)</td>
</tr>
<tr>
<td>ROA</td>
<td>-1.33298</td>
<td>-3.63826</td>
<td>-4.7882</td>
<td>I(1)</td>
<td>-0.50222</td>
<td>I(1)</td>
<td>-0.0124</td>
<td>I(1)</td>
</tr>
<tr>
<td>NIM</td>
<td>-2.93176</td>
<td>-3.71191</td>
<td>-0.3374</td>
<td>I(0)</td>
<td>0.95872</td>
<td>I(1)</td>
<td>-3.7863</td>
<td>I(1)</td>
</tr>
<tr>
<td>STD</td>
<td>-0.31646</td>
<td>-3.71191</td>
<td>-0.3374</td>
<td>I(0)</td>
<td>-1.17515</td>
<td>I(1)</td>
<td>-2.8568</td>
<td>I(1)</td>
</tr>
<tr>
<td>LTD</td>
<td>-0.32638</td>
<td>-3.57565</td>
<td>0.95872</td>
<td>I(1)</td>
<td>0.17515</td>
<td>I(1)</td>
<td>-1.8348</td>
<td>I(1)</td>
</tr>
<tr>
<td>TDE</td>
<td>1.73484</td>
<td>-3.39097</td>
<td>-1.17515</td>
<td>I(1)</td>
<td>-0.54136</td>
<td>I(2)</td>
<td>-3.9131</td>
<td>I(2)</td>
</tr>
<tr>
<td>SIZE</td>
<td>2.57785</td>
<td>-1.88485</td>
<td>0.23259</td>
<td>I(1)</td>
<td>-2.7254</td>
<td>I(1)</td>
<td>1.91258</td>
<td>I(1)</td>
</tr>
<tr>
<td>GDP</td>
<td>0.01333</td>
<td>1.82166</td>
<td>-2.48155</td>
<td>I(2)</td>
<td>-0.53442</td>
<td>I(1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: t-stat = t-statistics. I(d) = integrated by the order of d. FV = firm value. ROA = return on asset. NIM = net interest margin. STD = short-term debt to total asset ratio. LTD = long-term debt to total asset ratio. TDE = total-debt to equity ratio. SIZE = size of banks. GDP = growth of GDP.

The null hypotheses shows that the data are non-stationary, or contains a unit root.

* Significant at 1% and ** at 5% respectively.

4.3. Panel Data Analysis

The empirical estimation used in this study was the panel data analysis which is a special technique which accounts for the time-series and cross-sectional dimension of the dataset. Different techniques were used in the study for estimation and the decision to choose the model which best fitted our data was based on the specific econometric test.

<table>
<thead>
<tr>
<th>Var.</th>
<th>FV</th>
<th>ROA</th>
<th>NIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std</td>
<td>0.0920</td>
<td>-0.1118</td>
<td>-2.18**</td>
</tr>
<tr>
<td>LDT</td>
<td>0.1725</td>
<td>-0.0712</td>
<td>-3.09**</td>
</tr>
<tr>
<td>TDE</td>
<td>0.00008</td>
<td>-0.0001</td>
<td>-1.86***</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.1870</td>
<td>0.1359</td>
<td>2.80*</td>
</tr>
<tr>
<td>GDP</td>
<td>0.3222</td>
<td>0.0669</td>
<td>3.05*</td>
</tr>
<tr>
<td>R-sqd</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>F-stat</td>
<td>91.87</td>
<td>54.31</td>
<td>29.83</td>
</tr>
<tr>
<td>Prob&gt;F</td>
<td>0.0000*</td>
<td>0.0000*</td>
<td>0.0000*</td>
</tr>
<tr>
<td>Hausman</td>
<td>REM</td>
<td>REM</td>
<td>REM</td>
</tr>
</tbody>
</table>

Note: * indicates significant at 1%, ** indicates significant at 3%, *** indicates significant at 10%.
Therefore, in order to determine the effects (fixed or random), the study conducted a Hausman specification test to choose the appropriate empirical models. The summary of the panel data analysis and the Hausman test is presented in Table 3.

The results from the specification test indicated that the random effect model was suitable for all the empirical models in the study proxied by firm value (FV), return on asset (ROA) and net interest margin (NIM) as dependent variables.

4.4. Interpretation of Empirical Model

This study investigated the effect of various financing risk indicators on firm value and it represented the long-term bank performance. The model which used firm value as a measure of performance indicated this empirical model in Equation 4:

\[
FV_{it} = 0.0561 + 0.1725 (LTD) - 0.000081 (TDE) - 0.5222 (GDP)
\]

(4)

The empirical model above shows that long-term debt to total-assets ratio has a positive and significant effect on firm value. This suggested that a 1% improvement in long-term debt to total-assets ratio increased the firm value of banks by around 2%, \textit{ceteris paribus}. However, total debt to equity ratio had a negative and significant impact on firm value. This suggested that a decrease in total debt to equity ratio by 1%, improved firm value by 0.001%, \textit{ceteris paribus}. The GDP had a negative and significant effect on the firm value. The consequence was that unfavorable economic growth would decrease firm value by around 5%, \textit{ceteris paribus}.

\[
ROA_{it} = 0.0808 - 0.1113 (STD) - 0.0712 (LTD) - 0.00012 (TDE)
\]

(5)

The empirical model indicated in Equation 5 with (ROA) as the performance measure indicated that the short-term debt to total-assets ratio had a negative and significant impact on return on asset (ROA). This implied that a decrease in short-term debt to asset ratio by 1%, would improve the return on asset by 1.1%, \textit{ceteris paribus}. Similarly, the long-term debt to total asset ratio had a negative and significant effect on return on asset. This suggested that a decrease in long-term debt to total asset by 1%, would improve the return on asset by around 0.7%, \textit{ceteris paribus}. Conclusively, the total debt to equity ratio also had a negative and significant impact on return on asset. This suggested that a decrease in total debt to equity ratio by 1%, would improve the return on asset by around 0.001%, \textit{ceteris paribus}. Other variables were found to be insignificant.

\[
NIM_{it} = 0.1266 - 0.0971 (STD) - 0.1609 (LTD) - 0.3999 (GDP)
\]

(6)

The empirical model denoted in Equation 6 of the study with net interest margin as the performance measure specified that the short-term debt to total-assets ratio had a negative and significant effect on net interest margin (NIM). The implication was that a decrease in short-term debt to asset ratio by 1%, would improve the net interest margin by approximately 1%, \textit{ceteris paribus}. Similarly, the long-term debt to total-asset ratio had a negative and significant impact on the return on assets. This suggested that a decrease in long-term debt to total asset by 1%, would improve the net interest margin by around 1.6%, \textit{ceteris paribus}. The GDP exerted a correct positive and significant influence on firm value. The plausible implication was that a 1% improvement in the GDP implied an increase in the net interest margin of banks by around 4%, \textit{ceteris paribus}.

5. DISCUSSION OF FINDINGS

The empirical result showed that few of the main variables did have a significant influence on firm value and profitability. The long-term debt to total asset ratio had a positive and significant relationship with banks’ firm value. The plausible reason as that if banks can improve their long-term debt ratio, their firm value will also increase in the long-term. This implied that any upsurge in leverage would ultimately increase firm value.

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The total-debt to equity ratio and GDP showed a negative and significant association with firm value. The implication was that when banks failed to cushion its borrowing activities through debt-financing, the firm value ultimately decreased in the long-term either with the loss of investors or perpetual loss in investments. The results also revealed that unfavorable economic growth affected the value of firms.

Since prior studies have not used the measure of firm value used in this study, it is difficult to compare the results with results from previous studies that have used different measures of firm value. However, the short-term debt to total-assets ratio, long-term debt to total-assets ratio and total-debt to total-equity ratio all had a negative and significant relationship with the return on asset. This was supported by the findings of Habib et al. (2016); Zeitun and Tian (2007); Rajan and Zingales (1995); Abor (2007) but was contrary to the findings of Akhtar et al. (2016); Frank and Goyal (2003); Berger and Patti (2006); Hadlock and James (2002); Ghosh et al. (2000); Champion (1999) who finds a positive significant relationship.

These empirical findings could be supported by the signaling theory which anchors its propositions on creditworthiness between firms issuing debt and equity financing. It argues further that firms are perceived to signal more favorable prospects when issuing debt in order to finance projects as that indicates an anticipation of higher returns while firms issuing equity financing are perceived to have insufficient creditworthiness to obtain debt financing. However, the choice of the right proportion of debt will assist in perpetual growth both in the short-term and long-term performance of banks. Consequently, the short-term debt to total-asset ratio, long-term debt to total-asset ratio and GDP all had a negative and significant relationship with the net interest margin. The tremendous negative impact of debts on profitability (NIM) leads to an increase in the overall risk of the bank. An increase in the financing risk (debt) incurred by banks could be costly, resulting in low profitability.

6. CONCLUSION

The formative study of Modigliani and Miller (1958) prompted copious literature to explore and juxtapose the consequences of financing risk on firm value and profitability. While most studies have examined these effects in advanced countries, there were very little empirical studies on emerging, evolving or transitioning countries such as Nigeria. The contribution of this study emphasizes the need to reduce excessive reliance on debt financing and how, by controlling debt in its financing options, the preferred level of long-term (firm value) and short-term (profitability) performance can be attained.

The outcomes of this research study are valuable for managers, investors, analysts and for scholars. The measure of firm value used considers the cash and cash equivalent, debt and preferred stock of the firm. It is imperative for investors and potential owners during mergers and acquisition to determine the net worth of the firm and the relevant factors affecting them. Two notable accounting-based performance measures (ROA & NIM) and a market-based measure (firm value) were used.

The method used in the study was panel data (i.e. random effect) with time-series of seven years (2009 to 2015) and cross-sections of sixteen commercial banks. The empirical results indicated that capital structure (particularly, TDE and GDP) impacted negatively while (LTD) impacted positively on firm value. Contrariwise, the variables STD, LTD, and TDE had a negative and significant impact on profitability (ROA). The variables STD, LTD and GDP impacted negatively on firm performance as measured by NIM.

Conclusively, this study could posit that financing choices, in general terms, has strong effect on both the firm value and profitability as measures of financial performance of Nigerian commercial banks. The recommendation for future studies is that further research could explore the impacts of financing risk on financial firm performance in the non-financial sector. Future study could also explore the combined influence of ownership structure and capital structure on firm value and possibly consider other firm characteristics that might have a significant effect on firm performance.
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