Impact of Capital Structure on Financial Performance of listed Insurance firms in Nigeria

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Abstract
This study examines the impact of capital structure on financial performance of listed insurance firms on the Nigerian Stock Exchange. The study adopted an ex-post facto research design and utilized panel data collected from annual reports and accounts of the sampled firms for the periods of 2013 to 2017. The Data was analyzed using a panel data regression technique to examine the extent of the impact of capital structure on the financial performance of Nigerian insurance companies. It was found out that capital structure proxied by retained earnings, debt and equity has significant impact on financial performance measured by return on asset (ROA) of listed insurance companies in Nigeria. Thus, the study concludes that statistically, capital structure is a major determinant of firm financial performance. Therefore it is recommended that managers of the companies should exercise caution while choosing their capital structure as it affects their performance and more effort to be geared toward internally providing additional capital than to look for debt.

Keywords: capital structure, retained earnings, equity, debt and return on asset

Introduction

Capital structure is one of the important decisions by finance managers. Pandey (2010) defined capital structure as the various means of financing a firm, that is, the proportionate relationship between debt and equity. He further stated that capital structure is a significant managerial decision which influences the shareholder's return and risk as the market value of the share may be affected by the capital structure decisions.

The determination of a company's capital structure constitutes a difficult decision, one that involves several and opposed factors, such as risk and profitability. The decision becomes even more difficult, in times when the economic environment in which the company operates presents a high degree of instability (Mahmud and Musa, 2016**).** Capital structure is the various means in which a firm finances its operations which can either be through debt or equity capital or combination of both (Saad, 2010).

Capital structure decisions are very important for a firm to operate successfully. The primary objective of a firm is to maximize the wealth of its shareholders. To put it another way it means that to maximize its earnings per share or net income (Jensen & Meckling, 1976). A way to achieve that is to reduce its cost of financing or to finance with a source having less cost and large benefits. Firms nowadays maintain a mix of debt and equity, but the problem is that which proportionate of debt and equity has greater benefits against lessor costs. This is a problem to answer because different sources of finances have different cost structures and benefits allowing the firms to make it as a competitive advantage. One solution can be that to choose the mix which maximizes the shareholder's wealth but different firms have different impacts of the sources of finance (Haseeb and Muhammad, 2013).

The choice of capital structure and its subsequent risk experience is very vital in financial performance of every company. Hence, the choice of debt or equity ultimately results in the growth value of investment made by numerous sets of investors particularly equity investors (Watson and Head, 2007).

Financing decision is the critical and most difficult task faced by managers. Boosting financial performance is a major concern of all the stakeholders of an enterprise. Several studies were conducted in the area of capital structure in respect of its financial performance in different countries across various sectors of the economy.

Alexandra, Vintila and Cristian (2018) on companies listed on the Bucharest Stock Exchange, Ajibola, Wisdom and Qudus (2018) and Oyedokun, Job-Olatuji and Sanyaolu (2018) on quoted Nigerian manufacturing firms, Rajeswer and Suryanarayana (2018) on Companies Listed on the Bombay Stock Exchange, Nassar (2016) on companies listed on Istanbul Stock Exchange (ISE), El-Maude, Ahmad and Ahmad (2016) on firms in Nigerian cement industry, Oziomobo and Ghazali2 (2016) in Nigeria, and a hosts of many other studies. However no study to the best of researcher's knowledge uses the three (3) most important aspect of capital structure (retained earnings, debt and equity) in determining financial performance

of companies locally or internationally is pointed out by pecking order theory. Furthermore, Nigerian insurance firms listed on the floor of Nigerian stock exchange (NSE), was not studied before now on capital structure and financial performance. Therefore this study will serve as a pioneering effort in examining the impact of capital structure (measured by return earnings, equity and debt) on financial performance of insurance companies listed on the floor of NSE.

The Concept of Capital Structure

Capital structure is seen by El-Maude, Ahmad and Ahmad (2016) as a situation where debt and equity form the basis of financing business activities. As debt holders exert minimum control over the company, and do not in any case determine how the business activities should be run. They are on side of the fixed rate of return and protected by contractual terms of obligations. This term determine what return they are entitling to and when is it due for payment. Equity holders, on the other way round, are the residual suitors of all the business' returns after resolving for interest on debt. They however, form the most risk bearers, having greater control virtually overall activities, decision inclusive.

Nirajini and Priya (2013) define capital structure as the way in which an organization is financed a combination of long term capital (ordinary shares and reserves, preference shares, debentures, bank loans, convertible loan stock and so on) and short term liabilities such as a bank overdraft and trade creditors. From the foregoing, it is pertinent to note that, capital structure has to do with financing business activities with the combination of debt and equity financing.

Theoretical Framework

Several studies have had various explanations which serve as theoretical support on the concept of capital structure. For the purpose of this research, the paper looks at the most commonly used theories on capital structure among others.

Trade-off Theory

Several studies had it that the choice of capital structure matters in affecting firm's performance. Trade-off theory refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits (Margaritis and Psillaki, 2009). Trade-off theory gives chance for the existence of bankruptcy cost. It states that there is an advantage to financing with debt (namely, the tax benefit) and that there is a cost of financing with debt (the bankruptcy costs and the financial distress costs of debt) (Kraus and Litzenberger, 1973). Miller (1977) argues that these costs do exist indeed, but they seem inexplicably small relative to tax savings as they are supposedly balanced.

Pecking Order Theory

The pecking order theory of capital structure as introduced by Donaldson (1961) is among the most influential theories of corporate leverage. It goes contrary to the idea of firms having a unique combination of debt and equity finance, which minimize their cost of capital. The theory suggests that when a firm is looking for ways to finance its long-term investments, it has a well-defined order of preference with respect to the sources of finance it uses. It states that a firm's first preference should be the utilization of internal funds (i.e. retain earnings), followed by debt and then external equity. He argues that the more profitable the firms become, the lesser they borrow because they would have sufficient to undertake their investment projects. He further argues that it is when the internal finance is inadequate that a firm should source for external finance most and preferably bank borrowings or corporate bonds. And after exhausting both internal and bank borrowing and corporate bonds, the final and least preferred source of finance is to issue new equity capital.

Pecking Order theory of capital structure is adopted as the underpinning theory for this study. Therefore, internal financing will also form part of the independent variables of the study.

Review of empirical studies

Several researchers both in Nigeria and oversees studied capital structure in relation to firms' financial performance. Evidence shows that findings were obtained from the studies as regard to capital structure and financial performance of firms, industry as well as the economy as whole. Latest among the studies reviewed

are the work of Alexandra, Vintila and Cristian (2018) whose study analyze the evolution of the main theories regarding the capital structure and the related impact on risk and corporate performance. Where they used multivariate fixed-effects regressions, as well as dynamic panel-data estimations (two-step system generalized method of moments, GMM) on a panel comprising the companies listed on the Bucharest Stock Exchange and found out that leverage is positively correlated with the size of the company and the share price volatility. On the other hand, the debt structure has a different impact on corporate performance, whether this calculated on accounting measures or seen as market share price evolution. Ajibola, Wisdom and Qudus (2018) applied Panel OLS methodology to analyse the impact of capital structure on financial performance of quoted manufacturing firms in Nigeria and found out that a positive statistically significant relationship exist between long term debt ratio, total debt ratio and return on equity (ROE) while a positive statistically non significant relationship between ROE and Short term debt ratio.

Oyedokun, Job-Olatuji and Sanyaolu (2018) used OLS regression as a tool of analysis to examine the effect of capital structure on the financial performance of firms in Nigerian manufacturing sector. The study reveals that equity has a significant positive effect on earnings and dividend per share while the relationship between total debts on earnings per share is negative. However, total debt and equity were negatively but not significantly affecting earnings per share and market price per share respectively. Rajeswer and Suryanarayana (2018) employed Correlation, ANOVA and OLS regression tools of analysis were employed to examine the relationship and impact of capital structure on financial performance of Selected Companies Listed on the Bombay Stock Exchange. The results show that there is a significant relationship and impact of debt equity ratio, short-term debt to total assets, and total assets and total debt on return on equity.

Oreoluwa, Samuel and Damilare (2017) examines the effect of capital structure (proxied by STDTA, LTDTA, and TDTE) decisions on firm performance using panel dataset analysed using pooled, fixed effect and random effect models. The study examined the impact of STDTA, LTDTA, and TDTE (being the explanatory variables) on ROA and ROE, which represents the dependent variable while controlling for size, tangibility and Growth. The study found out that short term debt and total debt to total equity have significant negative effect on performance. However, short-term debt to total asset and long-term debt to total asset have significant positive effect on ROE while total debt to total equity has significant negative effect. Nassar (2016) A multivariate regression analysis is applied to examine the impact of capital structure (Debt ratio) on the financial performance (ROA, ROE and EPS) of industrial companies listed on Istanbul Stock Exchange (ISE). The results show that there is a negative significant relationship between capital structure and firm performance.

El-Maude, Ahmad and Ahmad (2016) used correlation and regression tools of analysis to examine the impact of capital structure (long term and short term debts) on financial performance (ROA and ROE) of firms in Nigerian cement industry. The study reveals that, there is statistically significant positive effect between long and short term liability on Return on Assets (ROA) and Return on Equity (ROE). Oziomobo and Ghazali2 (2016) This study examines the capital structure and firm performance (Tobin's Q and ROA) evidence from Nigeria. It was found out that assets turnover have a positive and significant relationship with Tobin's Q. Also, risk maintains negative and significant relations with Tobin's. Moreover, the age of a firm has negative and significant with ROA and Sales growth maintains positive and significant with ROA.

Earliest studies reviewed in this study are the work of Margatitis and Psillaki (2009), where they used quartile regression methods and found out that the nature of relationship between leverage ratios (long term and short term leverage) and firm performance is positive and significant. Also, Adeyemi and Abor (2011) examined the relationship between capital structure and firms value. Their study used chi-square to measure longitudinal data. Their findings reveal significant positive relationship between the choice of capital structure and market value. Besides, Awunyo and Badu (2012), study listed banks to examined the impact of capital structures on performance of banks. The study employs both market and accounting performance measure and leverage ratios, firm size, age and board size are regress. Their finding shows that listed banks are highly geared and negatively related to bank performance. This may be attributed to the researchers over dependence on short term debt due to high level of lending rate and low level of bond market activities. Similarly, Antwi and Zhao (2012) used cross-sectional data on 34 quoted firms in Ghana and their result shows that component of capital structure (i.e., equity capital) is important to the firm value. Long term debt as the key determinant of firms

value, is discovered to have more impact than equity capital. Babalola (2012) assessed the impact of capital structure on firm performance using 10 firms over the period of 10 spanning from 2001-2009. He measures performance in a quadratic function, whereby performance forms the non-linear function of capital structure, as proxy by leverage ratio. The finding supports trade off theory in another dimension. In another study conducted by Ganiyu and Babalola (2012), where performance is measured by return on Assets and corporate governance variables to find their effect on capital structure and the result indicate that corporate governance has impact on company's financial decision.

Muritala (2012), in his effort to analyse capital structure on firms' performance in Nigeria, used unit root test and found that all variables used were non-stationary at all level. The study proposes that negative relationship exist between capital structure and firm performance. Data analysed using panel least square confirm that asset turnover, age, tangibility and firm size are positively related to firm's financial performance. In Sri Lanka Leon (2013) and Nirajini and Priya (2013) study the effect of capital structure of firms performance. The former examined the listed manufacturing firms, while the later study trading companies listed at the stock exchange. Both studies used 5 years data from financial reports and accounts of the selected companies in the respective industries. Leon employs ROE and ROA to measure performance, while Nirajini and Priya used Gross profit, net profit, ROCE, ROE and ROA as performance measures. Both results indicate significant relationship between performance and leverage. The result of empirical literature on the relationship between capital structure and firm performance are conflicting, as such necessitate further research despite those conducted in Nigeria and across, as little need to be done to improve the researches to suit the Nigerian context given the differences in technological advancement, level of economic growth, politics, laws, leadership style and level of awareness. Hence, this study covers the period spanning 2010-2014.

In view of the above empirical studies so far reviewed and based on the Pecking order theory reviewed the following hypotheses are hereby formulated in null form:

Ho_1: internal financing (retained earnings) has no significant impact on return on equity of Nigerian Insurance companies.

Ho_2: debt ratio has no significant impact on return on equity of Nigerian Insurance companies.

Ho_3: equity to total asset has no significant impact on return on equity of Nigerian Insurance companies.

Methodology

This study employed the ex-post facto research design which is based on the use of documented audited annual reports and accounts of listed cement companies in Nigerian stock exchange. The population of this study comprises of all the nine (9) listed cement companies in the Nigerian Stock Exchange out of which four (4) were sampled. For a firm to qualify for selection, two criteria were used, first only those firms who report their financial statement consistently during the period under study (2013 to 2017) were considered. Secondly, a firm must have been quoted without being delisted from 2013 to 2017. The data for the study were obtained from the audited annual reports and accounts of the sampled firms for the period of 5years from 2013- 2017.

The variables of the study comprise of dependent and independent variables. The independent variables is capital structure proxied by short term debt ratio (STD), long term debt ratio (LTD) and total debt ratio (TD) while the dependent variable is financial performance proxied by return on assets (ROA), size measured by natural log of total asset wasused as a control variable as used by Khalid (2012), Tukur and Aliyu (2014) and Saleem and Rehman (2011) among others. The data was analyzed using descriptive statistics and regression analysis. The descriptive statistics explains the various statistics such as mean, standard deviation and long term debt structure of the cement companies and regression analysis was employ with the purpose of testing the relationship between variables of the study.

Data Analysis and Discussion of Results

This section presents, analyses, interprets and discuss the result obtained from the data generated from annual report and accounts of the sampled companies for the period of the study. Diagnostic checks were run such as test for heteroskedasticity, variance inflationary test and hausman specification test. The results of the test reveals a presence of heteroskedasticity in the model which is later corrected by running robust OLS regression while vif test shows that the collinearity among the independent variables does not exist.

Table 2: Regression Result of capital structure and financial performance

ROA	Coef.	Std. err	t	p>|t|
Retained earnings	20.609	7.6931	2.68	0.010
Debt to equity	0.4817	0.4515	1.07	0.291
Equity to total asset	0.5299	0.1408	3.76	0.000
Constant	-148.28	63.027	-2.35	0.023
R-squared	0.7145	Prob>F	0.0020	

Source: Author's Computation

Table 2 presents the regression results of the dependent variable (ROA) and the explanatory variables (retained earnings (RE), debt to equity (DE) and equity to total assets (ETA)). The coefficient of R-squared shows 71.45% which indicate that the variables used in the model accounts for about 71.45% variation in ROA as the dependent variable, whereas the remaining of the variation accounts for the outcome of other variables which were not considered in this model. However, the whole probability is positively significant at 5% levels of significant.

In assessing the mode, the results shows that, the relationship between ROA and RE is positive and significant, this can be justified with the "t" value of 2.68 and P>|t| 0.010. Similarly the result of the coefficient 20.609 is positive, which means that unit increase in RE will lead to about 21 units increase in financial performance of insurance companies in Nigeria. This infers that, RE has a positive relationship with ROA. So also the relationship between ROA and ETA is positive and significant, which can be justified with positive "t" value of 3.76 and P>|t| 0.000 which also has a positive coefficient of 0.5299, this implies that, ETA has a positive and statistically significant relationship with ROA. Meaning that, both retained earnings and equity increased financial performance of the Nigerian insurance companies.

Conclusions and Recommendations

The research examines the impact of capital structure on firm's financial performance of insurance companies in Nigeria. From the findings of the study, it can be inferred that capital structures increases financial performance as thus; there is statistically significant relationship between retained earnings, equity financing and return on assets. However the relation is foun not significant between debt financing and financial performance. Therefore, this study concludes that retained earnings is the most important source of capital to business, this is in line with the pecking order theory of capital structure. Secondly, the study concludes that debt as a second most important source of capital is found to be not significant therefore the finding of this study is in contrast to pecking order theory. Equity in the other hand is found to be significantly influencing financial performance and is therefore concluded to be the second most important source of capital to business as opposed the pecking order theory that it's the third.

Based on the findings, the research recommends that firms should encourage the use of internal financing when deciding on their capital structure since it retained earnings and equity have positive impact on their financial performance.

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