EFFECT OF FIRM CHARACTERISTICS ON CAPITAL STRUCTURE OF INSURANCE COMPANIES LISTED ON NIGERIA STOCK EXCHANGE

Mbonu, Chikwelu Maduabuchi[1] and Amahalu, Nestor Ndubuisi

1 Department of Accountancy, Nnamdi Azikiwe University Awka, Anambra State, Nigeria

Abstract: This study ascertained the effect of Firm Characteristics on Capital Structure of Insurance Companies Listed on Nigeria Stock Exchange from 2011-2020. Specifically, the study determined the effect of Firm Size, Liquidity and Revenue Growth on Debt-to-Equity Ratio. Purposive sampling technique was employed to select fourteen (14) listed insurance companies in Nigeria. Panel data were used in this study, which were obtained from the annual reports and accounts of sample firms for the periods 2011-2020. Ex-Post Facto research design was employed. Inferential statistics using Pearson correlation coefficient and Panel least square regression analysis were applied to test the hypotheses of the study. The results showed that Firm Size exerts a significant positive effect on Debt-to-Equity Ratio; Liquidity and Revenue Growth have a significant negative effect on Debt-to-Equity Ratio respectively at 5% level of significance. This study recommended inter alia that Insurance firms should strive to attain the height of a sound asset base in order to meet, on a timely basis, their responsibilities towards the customers and by extension, ensuring an optimal capital structure.

Keywords: Firm Size, Liquidity, Revenue Growth, Leverage

Introduction

Background of the Study

Finance is one of the crucial factors to make a business successful. For taking financing decision, it is required to consider capital structure of a firm so that financial manager is able to take effective investment decision. Capital structure mainly consists of debt and equity of a firm. The main responsibility of financial manager is to maximize value of firm more specifically maximization of shareholder's wealth by subsiding the cost of funds. So for maximizing the shareholder's wealth, financial manager needs to investigate optimal capital structure to finance. For choosing the capital structure of a firm, it is required to consider different factors that are related to optimize the profitability and value of a firm. Capital structure decisions made by firms have an impact on the net cost or value of a certain firm. To finance their assets firms combine both debt and equity. A good judgment can increase shareholders' wealth while a poor decision may diminish the net esteem of the firm ((Liu, Wujun & Chen, 2021). Several variables such as profitability, size, growth, tangibility, non-debt tax shield, volatility and liquidity can influence a firm's capital structure and it is left for the firm to decide which figure is ideal. A firm can use a particular factor or several mix of financial to achieve optimality (Ecowas. Omojolaibi, Oladipupo and Okudo, 2019). Optimal mixing of finance gives a firm two advantages which are maximization of the value of the firm and minimizing its cost of capital, and there is need for a firm to figure out which of the capital structure will make it reach its optimality.

Firm characteristics are those attributes such as firm size, leverage, liquidity, sales growth, capital, firm age, dividend, market share, off balance sheet activities, operating expenses, among others, that affect the operations of a firm (Ezechukwu & Amahalu, 2016). It is concerned with the ability of firms to source for funds to be used as capital to finance their operations and settle their short terms financial obligations as at when due using their current assets in order to gain the confidence of creditors and other lenders of funds as well as minimization of operating expenses for performance improvement. Most business entities use debt to finance their operations with the hope of improving their performance. By doing so, a company increases its leverages because it can invest in business operations without increasing its equity. Capital structure plays a vital role for every firm, but for this to happen, there should be a mix of both equity and debt in an optimal way to make the most of the firm's worth and reduce the rate of capital. However, realistically, perfectly optimal capital structure is almost impossible to determine because of some conflicting variables. In this study, the likely characteristics of firm's that determines

such optimal capital structure were analysed with a focus on Insurance companies listed on Nigeria Stock Exchange.

Statement of the Problem

The insurance companies are faced with serious decision making concerning the capital structure relative to their performance. The determinants of optimal capital structure and their influence on firms' decisions still remain unsolved, giving ample scope for further research. The assessment of the effect firm characteristics on capital structure in Nigeria has been a major problem that has not been resolved among researchers. Hitherto, there has been different methodology, variables, theoretical framework and there is still no concrete conclusive empirical evidence in the literature about how firm characteristics influences capital structure in Nigeria. For instance, Georgios, Tsoukas and Zhang (2019); Salehi, Fakhri-Mahmoudi and Gah (2019); Amahalu, Abiahu, Obi and Okika (2016) found a positive relationship between firm characteristics and financial performance. Neves, Serrasqueiro, Dias and Hermano (2020) reported a negative relationship between firm characteristics and financial performance. Krishna and Khaled (2020) documented a non-significant relationship between firm characteristics and financial performance. In Nigeria, studies on the relationship between firm characteristics and performance have been emphasized more on the general corporate businesses and specifically on the banking firms listed on the stock market. However, despite the importance of the insurance sector in risk palliations, value creation and the growth of Nigerian economy, it has been under-investigated and ignored in this context. Therefore, this study examined the effect of firm characteristics on capital structure listed insurance firms in Nigeria from 2011 to 2020.

Objectives of the Study

The main objective of the study is to determine the effect of firm characteristics on capital structure of Insurance companies listed on Nigeria stock exchange. The specific objectives are to

i.   Ascertain the effect of firm size on debt-to-equity ratio of listed Insurance companies in Nigeria
ii.   Evaluate the effect of liquidity on debt-to-equity ratio of listed Insurance companies in Nigeria
iii.   Verify the effect of revenue growth on debt-to-equity ratio of listed Insurance companies in Nigeria

Research Hypotheses

The hypotheses of the study were tested in null form:

Ho$_1$: Firm Size has no significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria
Ho$_2$: Liquidity has no significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria
Ho$_3$: Revenue Growth has no significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria

Review of Related Literature

Firm Characteristics

Firm characteristics can be defined as the wide varieties of information disclosed in the financial statement of business entities that serve as the predictors of the firms' quality of accounting information and performance. Firm characteristics can also be defined as the behavioral patterns of company's operation which can enable them to achieve their objectives throughout the period of their operations (Amahalu & Ezechukwu, 2017). Firm characteristics refer to the various accounting information reported by firms in their financial statements for a particular accounting period which can send a message to various stakeholders of firms about their performance. Company's characteristics vary from one business entity to another. The company's characteristics can be determined based on the relevant information disclosed on its financial statements for a particular accounting period (Bunea & Dinu, 2020).

Firm Size

A firm is a for-profit business organization such as a corporation, limited liability company (LLC), or partnership that provides professional services. The size of a business unit means the size of a business firm. It means the

scale or volume of operation turned out by a single firm. The term' size of business' refers to the scale of organization and operations of a business enterprise (Okudo & Ndubuisi, 2021). One of the most important entrepreneurial decisions in organizing a business is realizing its 'size' as it affects in company and profitability of business enterprises (Amahalu, Nweze & Obi, 2017). In an industry there are firms of varying sizes. The costs of production in these firms of different sizes vary. Economists are concerned with the best size of a business unit, that is, a firm in which the average cost of production per unit is the lowest (Sindhuja, 2021). The theory of the firm asserts that firms exist to maximize profits.

Liquidity

Liquidity refers to the efficiency or ease with which an asset or security can be converted into ready cash without affecting its market price. The most liquid asset of all is cash itself. Liquidity is a measure companies uses to examine their ability to cover short-term financial obligations. It's a measure of business's ability to convert assets or anything a company owns with financial value into cash. Liquid assets can be quickly and easily changed into currency. Liquidity describes the degree to which an asset can be quickly bought or sold in the market at a price reflecting its intrinsic value (Amahalu & Ezechukwu, 2017). Cash is universally considered the most liquid asset because it can most quickly and easily be converted into other assets. Tangible assets, such as real estate, fine art, and collectibles, are all relatively illiquid. Other financial assets, ranging from equities to partnership units, fall at various places on the liquidity spectrum Liquidity is the degree to which a security can be quickly purchased or sold in the market at a price reflecting its current value. Liquidity refers to the ease with which a security or an asset can be converted into cash at market price It is vital to factor in liquidity while planning your investments to ensure that your current needs do not eat into your long-term investment goals (Scott, 2021).

Revenue Growth

Revenue Growth is the parameter which is used to measure the performance of the sales team to increase the revenue over a pre-determined period of time. Revenue growth is an essential parameter for survival and financial growth of the company. Revenue growth is a strategic indicator that is used in decision making by executives and the board of directors, and influences the formulation and execution of business strategy (Hitesh, 2018). Revenue growth is the percent growth in the net revenue of a business from one fiscal period to another. Net sales revenue are total sales revenue less returns, allowances and discounts. Revenue growth shows the increase in sales/revenue over a specific period of time, this is important because, an investor want to know whether the demand for a company's products or services will be increasing in the future (Amahalu, Egolum, Ezechukwu & Obi, 2018)

Capital Structure

The capital structure is the particular combination of debt and equity used by a company to finance its overall operations and growth. Debt comes in the form of bond issues or loans, while equity may come in the form of common stock, preferred stock, or retained earnings (Egolum, Amahalu & Obi, 2019). Capital structure maximizes the company's market price of share by increasing earnings per share of the ordinary shareholders. It also increases dividend receipt of the shareholders. Capital structure increases the ability of the company to find new wealth thereby creating investment opportunities (Maama & Mkhize, 2020).

Debt to-Equity Ratio

The Debt/Equity Ratio is a ratio of ordinary shareholders' equity and the stake of creditors in a company. In other words, it is a measure of a company's financial leverage. The debt-equity ratio is a measure of the relative contribution of the creditors and shareholders or owners in the capital employed in business (Amahalu & Obi, 2020). The debt-to-equity (D/E) ratio is used to evaluate a company's financial leverage and is calculated by dividing a company's total liabilities by its shareholder equity. The D/E ratio is a measure of the degree to which a company is financing its operations through debt versus wholly owned funds. More specifically, it reflects the ability of shareholder equity to cover all outstanding debts in the event of a business downturn. The debt-to-equity ratio is a particular type of gearing ratio ((Fernando, 2021).

Firm Size and Capital Structure

Firm size is among determinant factors of capital structure and particularly shows the profitability of business. In the context of international integration, emergence and vast influence of large enterprises-multinational corporations (MNCs) have proved the important role of scale in firm performance and business environment. Capital structure is an interesting topic not only for academic scholars but also for policymakers, in which firm size is one of the main factors deciding the operation of any enterprises (Eneh, Okegbe & Amahalu, 2019). Georgiana, Cristea, Jurcut, Buglea and Popa (2020); Okudo, Omojolaibi and Oladele, (2021) showed that different sizes could affect the capital structure in various ways. For example, for large enterprises the exploitation of economies of scale, the variety of business activities, the ability to exploit a large market, and the degree of easing administrative procedures essentially influence firm performance.

Liquidity and Capital Structure

Previous studies establish a link between capital structure and stock market activities (Widagdo, Jihadi, Oky & Sanju, 2020). According to Nurlaela, Mursito, Kustiyah, Istiqomah and Hartono (2019); Okegbe, Eneh and Amahalu (2019), firms with a lower level of liquid stocks may have higher issuance costs, thereby higher cost of equity compared to firms with more liquid equity. Following the literature, firms always face the issue of trading-off the net cost of equity against the net tax benefit of debt. Therefore, firms with lower liquidity may be financed by less equity and more debt. In the same stream, a number of previous studies concerning the link between stock liquidity and capital structure (Kurnia, Darlis & Putra, 2020; Al-Slehat, 2020) found that firms with lower stock liquidity tend to be more leveraged.

Revenue Growth and Capital Structure

The main goal for a firm going public is to increase the shareholder welfare by increasing the value of a firm. The firm value is very important, as higher firm's value will increase the welfare of the stockholder (Vo, 2021). The increase of stock price will also increase the value of the firm. The welfare of the shareholder and value of the firm are commonly represented on the stock price, which implicitly represent the investment decision, financing and asset management (Amahalu & Obi, 2020; Westreich, Edwards, Lesko, Cole & Stuart, 2019). In addition, the effect of capital ownership and debt policy may influence on firm value is subject to tax, agency cost, and financial difficulty due to the use of debt (Omojolaibi, Okudo & Shojobi, 2019; Goh, Tai, Rasli, Tan & Zakuan, 2018).

Theoretical Review

This study is anchored on Firm Growth Theory

Firm Growth Theory

The Firm Growth Theory was propounded by Penrose's (1959). A theory of the growth of firms is essentially an examination of the changing productive opportunity of firms. This productive opportunity, in Penrose's words, comprises all of the productive possibilities that its 'entrepreneurs' see and can take advantage of. Penrose's (1959) fundamentally dynamic vision of firms holds that firm growth is led by an internal momentum generated by learning-by-doing. Managers become more productive over time as they become accustomed to their tasks. Executive functions that initially posed problems because of their relative unfamiliarity soon become routinized. As managers gain experience, therefore, their administrative tasks require less attention and less energy. As a result, managerial resources are continually being released. This excess managerial talent can then be used to focus on value-creating growth opportunities (and in particular, the training of new managers). Firms are faced with strong incentives to grow, because while the knowledge possessed by a firm's personnel tends to increase automatically with experience, there is a challenge to take full advantage of this valuable firm-specific knowledge. It takes time and effort to successfully integrate new managerial resources within the firm, but once this is done these new recruits will be able to execute managerial tasks and, in turn, train managers themselves. In this way, a firm will grow in order to create value from its unused resources, which in turn will create new resources.

2.3 Empirical Review

Jaworski and Czerwonka (2021) identified the main determinants of the capital structure of energy industry companies in the European Union. The study was based on a panel of 6122 companies from 25 EU countries, operating between 2011 and 2018. The study used multiple regression analysis. The study obtained strong evidence for a positive relationship between corporate debt and tangibility and size, and a negative relationship for profitability and liquidity. The factors that also affected the share of debt in capital have turned out to be growth (positive relationship) and non-debt tax shield (negative relationship). The study has also shown a negative impact of the volume of energy consumption and the share of renewable sources in its production and a positive impact of market monopolization on the indebtedness of companies from the energy industry in the EU.

Georgiana, Thalassinos, Cristea and Grecu (2021) examined the role played by board characteristics (skills, diversity, structure, independence) in supporting risk management disclosure and shaping the financial performance of European companies operating in the financial services sector. The study exploited data from Thomson Reuters Eikon database in 2020 for 2019 fiscal year on a longitudinal sample of 144 companies with the head offices in Europe (25 countries). Following an empirical approach based on two modern financial econometric techniques; structural equation modelling (SEM) and network analysis through Gaussian graphical models (GGMs), the research outlined the decisive importance of an optimal board size, enhanced management skills, upward gender diversity (encompassed by women participation on board management), and structure (mainly a two-tier type, one management board, and a distinctive supervisory board) as fundamentals of risk management strategies, leading to improved financial achievements and a higher profitability for the analyzed companies.

Doorasamy (2021) examined the relationship between capital structure and firm value in East African countries and how managerial ownership influences the relationship. Sixty-five (65) listed firms in East Africa were selected for the study from 2010-2019. The study employed a GMM estimation technique. The evidence showed that leverage has a significantly negative impact on the value of firms in East Africa, suggesting that higher debt would result in a decrease of firm value. The implication of this result is that firms can increase their value by reducing their leverage level. Moreover, the study found that managerial ownership had an inverse and significant impact on the relationship between leverage and firm value. The conclusion is that leverage decreases the value of firms in East Africa.

Methodology

Research Design

This study employed the use of *Ex-Post Facto* research design.

Population of the Study

The population of this study comprises of twenty-three (23) quoted insurance companies in Nigeria as at 3ist December, 2020 (see appendix I).

Sample Size and Sampling Technique

Purposive sampling technique was adopted on the selection of the sample size. Based on this, fourteen (14) insurance firm that consistently submitted their annual reports and account to the Nigeria Stock Exchange from 2011 to 2020 were chosen for this study (refer to appendix II).

Nature and Source of Data

The nature of data for this study was essentially secondary data. The scope of this study spanned from 2011-2020 to ensure robustness of the empirical result. Panel data were collected from publications of Nigeria Stock Exchange, Fact books and Annual report and accounts.

Model Specification

The model for this study takes the following form:

$$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$$

Where:

Y	=	Capital Structure (Dependent Variable)
X	=	Firm Characteristics (Explanatory/Independent Variable)
β_0	=	Constant term (Intercept)
β	=	Coefficient of Firm Characteristics
μ	=	Error term (Stochastic Term)

Explicitly, the equation can be defined as:

capital structure = f (firm characteristics) + μ

Representing the equations with the variables of the construct, hence the equations below are formulated:

Model 1: $DER_{it} = \beta_0 + \beta_1 FSZ_{it} + \mu_{it}$
Model 2: $DER_{it} = \beta_0 + \beta_1 LQD_{it} + \mu_{it}$
Model 3: $DER_{it} = \beta_0 + \beta_1 RVG_{it} + \mu_{it}$

Where:

β_0	=	Constant term (intercepts)
β_{it}	=	Coefficients to be estimated for firm i in period t
μ_{it}	=	Error term/Stochastic term
DER_{it}	=	Debt-to-Equity Ratio of firm i in period t
FSZ	=	Firm Size of firm i in period t
LQD	=	Liquidity of firm i in period t
RVG	=	Revenue Growth of firm i in period t

Table .1 Measurement of Variables

Variable	Symbol	Variable Type	Formula
Debt-to-Equity Ratio	DER	Dependent	$\dfrac{\text{Total Debt}}{\text{Shareholders' Equity}}$
Firm Size	FSZ	Independent	Natural log of total assets
Liquidity (Current Ratio)	LQD	Independent	$\dfrac{\text{Currents Assets}}{\text{Current Liabilities}}$
Revenue Growth	RVG	Independent	$\dfrac{\text{Current Year Revenue} - \text{Previous Year Revenue}}{\text{Previous Year Revenue}}$

Data Presentation and Analysis

Table 2 Pearson Correlation Matrix

	DER	FSZ	LQD	RVG
DER	1.0000			
FSZ	-0.5187	1.0000		
LQD	0.0080	0.1558	1.0000	
RVG	0.1201	-0.6570	-0.0349	1.0000

Source: E-Views 10.0 Correlation Output, 2021

Interpretation of Correlation Matrix Result

The result of the correlation analysis in table 2 reveals a negative relationship between FSZ (-0.5187) and DER, while DER positively correlate with LQD and RVG at coefficient factors of 0.0080 and 0.1201 respectively.

Test of Hypotheses

Test of Hypothesis I

Ho1: Firm Size has no significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria

H1: Firm Size has significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria

Table 3 Panel Least Square Regression Analysis of Firm Size and Debt-to-Equity Ratio

Dependent Variable: DER
Method: Panel Least Squares
Date: 07/29/21   Time: 18:33
Sample: 2011 2020
Periods included: 10
Cross-sections included: 14
Total panel (balanced) observations: 140

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.816401	1.606268	-1.753382	0.0818
FSZ	0.416523	0.166761	2.497717	0.0137

R-squared	0.143252	Mean dependent var		1.188953
Adjusted R-squared	0.136319	S.D. dependent var		1.114114
S.E. of regression	1.093695	Akaike info criterion		3.031184
Sum squared resid	165.0713	Schwarz criterion		3.073207
Log likelihood	-210.1828	Hannan-Quinn criter.		3.048261
F-statistic	6.238590	Durbin-Watson stat		1.934053
Prob(F-statistic)	0.013674			

Source: E-Views 9.0 Regression Output, 2021

Interpretation of Regression Coefficient Result

As per the generated result in table 3, the equation (DER = $\beta_0 + \beta_1 FSZ_{it} + \mu_{it}$) becomes:
DER = -2.816401 + 0.416523FSZ + μ_{it}

According to the regression equation established, taking all factors into account (FSZ) constant at zero, ROA will be -2.816401. The data findings analyzed also showed that taking the independent variable at zero, a unit increase in FSZ will lead to 41.65% increase in DER. Table 4.2 shows that, the t-value for FSZ is 0.0137 with a probability value of 0.0137, suggesting that firm size exerts positive influence on DER and statistically significant at 5% level. The independent variable that was studied, explained only 14.32% of the factors affecting DER among insurance companies listed on NSE as represented by the R^2. This therefore means that other factors not studied in this research contribute 85.68% influence on DER of insurance firms listed on NSE. Thus the study reveals that firm size is a key influence of DER.

On the whole, the overall significance value is 0.013674 which is less than 0.05, thus the model is statistically significant in predicting how firm size affect the DER of insurance companies listed on NSE. Since the Prob F-statistic value = 0.013674 is less than the critical significance level of 5%, this shows that the overall regression model is significant at 5%. Thus, this study submits that Firm Size has a significant positive effect on Debt-to-Equity Ratio of listed insurance companies in Nigeria at 5% level of significance.

Test of Hypothesis II

Ho2: Liquidity has no significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria

H2: Liquidity has significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria

Table 4 Panel Least Square Regression Analysis of Liquidity and Debt-to-Equity Ratio

Dependent Variable: DER
Method: Panel Least Squares
Date: 07/29/21   Time: 18:33
Sample: 2011 2020
Periods included: 10
Cross-sections included: 14
Total panel (balanced) observations: 140

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.367300	0.158564	8.623009	0.0000
LQD	-1.424875	0.308297	-4.621753	0.0000

R-squared	0.213913	Mean dependent var		1.188953
Adjusted R-squared	0.206767	S.D. dependent var		1.114114
S.E. of regression	1.110338	Akaike info criterion		3.061388
Sum squared resid	170.1333	Schwarz criterion		3.103412
Log likelihood	-212.2972	Hannan-Quinn criter.		3.078465
F-statistic	21.97022	Durbin-Watson stat		1.962827
Prob(F-statistic)	0.000000			

Source: E-Views 9.0 Regression Output, 2021

Interpretation of Regression Coefficient Result

The generated result in table 4 is:
$DER = 1.367300 - 0.919391 LQD + \mu_{it}$
The implication of the regression equation is that one naira increase in liquidity ratio will cause debt-to-equity to reduce by 92%. The R-Squared of 0.213913 delineates that 21.39% of the systematic variation in the dependent variable (DER) is caused by the independent variable (LQD) while the remaining 78.61% was caused by other factors outside the scope of the model. The Beta coefficient for LQD at -0.919391 shows that Liquidity negatively associates with DER, while the t-statistic = -4.621753 with the associated p-value = 0.0000 indicates a significant relationship between LQD and DER, though, negative at 5% level of significance. The Durbin-Watson stat = 1.962827 is an indication that serial correlation problem does not exist in the model. Consequent on the result of the Prob(F-statistic) value = 0.000000 which is less than the conventional value of 0.05 (5%), this study upholds that liquidity has a significant negative effect on debt-to-equity ratio of listed Insurance companies in Nigeria at 5% level of significance.

Test of Hypothesis III

Ho₃: Revenue Growth has no significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria

H₃: Revenue Growth has significant effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria

Table 5 Panel Least Square Regression Analysis of Revenue Growth and Debt-to-Equity Ratio

Dependent Variable: DER
Method: Panel Least Squares
Date: 07/29/21   Time: 18:34
Sample: 2011 2020
Periods included: 10
Cross-sections included: 14
Total panel (balanced) observations: 140

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.214015	0.114115	10.63856	0.0000
RVG	-0.037515	0.013577	-2.763073	0.0065

R-squared	0.201108	Mean dependent var		1.188953
Adjusted R-squared	0.186130	S.D. dependent var		1.114114
S.E. of regression	1.117523	Akaike info criterion		3.074290
Sum squared resid	172.3425	Schwarz criterion		3.116313
Log likelihood	-213.2003	Hannan-Quinn criter.		3.091367
F-statistic	7.634575	Durbin-Watson stat		1.640938
Prob(F-statistic)	0.006507			

Source: E-Views 9.0 Regression Output, 2021

Interpretation of Regression Coefficient Result

The generated regression result in table 5 is:
DER = 1.214015 - 0.037515RVG + μ_{it}
The implication of the regression equation is that one naira increase in revenue growth will cause debt-to-equity to reduce by 3.75%. The R-Squared of 0.201108 delineates that 20% of the systematic variation in the dependent variable (DER) is caused by the independent variable (RVG) while the remaining 80% was caused by other factors outside the scope of the model. The Beta coefficient for RVG at -0.037515 shows that Revenue Growth negatively associates with DER, while the t-statistic =-2.763073 with the associated p-value = 0.0065 indicates a significant relationship between RVG and DER, though, negative at 5% level of significance. The Durbin-Watson stat = 1.640938 is an indication that serial correlation problem does not exist in the model. Consequent upon the result of the Prob(F-statistic) value =0.006507 which is less than the conventional value of 0.05 (5%), this study upholds that revenue growth has a significant negative effect on debt-to-equity ratio of listed Insurance companies in Nigeria at 5% level of significance.

Findings, Conclusion and Recommendations

Findings

Based on the analysis of this study, the following specific findings were deduced:

i. Firm Size has a significant positive effect on Debt-to-Equity Ratio of listed insurance companies in Nigeria at 5% level of significance.

ii. Liquidity has a significant negative effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria at 5% level of significance.

iii. Revenue Growth has a significant negative effect on Debt-to-Equity Ratio of listed Insurance companies in Nigeria at 5% level of significance.

Conclusion

This study determined the effect of firm characteristics on capital structure of Insurance companies listed on Nigeria stock exchange for 2011-2020 periods. Existing literature shows that researchers are yet to reach a consensus about the effect of firm characteristics on capital structure; therefore, the effect is yet to be well established. Data analysis revealed that a relationship exists between firm characteristics and capital structure of insurance sector in Nigeria. As disaggregated components, Firm Size exerted significant positive effect on DER, while Liquidity Ratio and Revenue Growth exerted a significant but negative relationship on DER of Insurance Companies listed on Nigeria Stock Exchange.

Recommendations

Based on the findings of this study the following recommendations were made:

i. Insurance firms should strive to attain the height of a sound asset base in order to meet, on a timely basis, their responsibilities towards the customers and by extension, ensuring an optimal capital structure.

ii. This study recommends that if a firm takes any debt as means of financing, they should consider the liquidity of the firm. When firms have more cash they should use the cash in financing the activities thus, minimizing the use of debt.

iii. Firms should reduce their debt ratio from their growth in revenue so as to avoid the debt ratio from reducing the profits made by the firm.

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