THE EFFECT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF INSURANCE COMPANIES

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Abstract: *This study is set out to examine the effect of capital structure on financial performance of insurance companies in Nigeria. The study investigated the relationship between three variables namely, Debt Capital, Equity Capital and Preferential Shares, and the dependent variable of financial performance, proxied by Return on Equity (ROE). The study covers operations of the insurance firms in Nigeria with a period coverage of 2010–2022. Ex-post facto research design was employed by the study and secondary source of data was generated from the Annual Financial Statements of the selected insurance firms. Panel Multiple Regression analysis was used to test the hypotheses stated in this study. The result of the findings revealed that the hypothesis shows positive significant relationship between Debt Equity (DE) and financial performance of insurance company, hypothesis two shows positive significant relationship between Equity Capital (EC) and financial performance of insurance company and hypothesis three shows positive significant relationship between Preferential Shares (PS) and financial performance of insurance company. The study therefore recommends that insurance companies should consider optimizing their Debt Equity Ratio to improve their financial performance. The positive relationship suggests that a higher level of debt in proportion to equity is associated with better financial performance. Insurance companies should focus on strengthening their Equity Capital to improve their financial performance. Finally, insurance companies should consider strategically utilizing Preferential Shares to enhance their financial performance.*

***Key Words* – Capital Structure, Financial Performance, Debt Capital, Equity Capital, Preferential Shares**

INTRODUCTION

The financial sector is one of the key components of economic development. A strong financial system promotes investment and allocates resources efficiently. A well-evolved and developed insurance industry provides long-term funds for economic development (Agiobenebo & Ezirim, 2012). The importance of the insurance sector in developed, as well as developing countries, has increased as it contributes significantly to economic growth and national wealth (Kaya, 2015).

Despite the challenges of the post-Covid-19 era, the Nigerian insurance sector has continued to compete fairly with its peers in Africa in terms of gross premium income (GPI), expanding market size, retention capacity, and keeping faith with policyholders in claims settlement. In Nigeria, the insurance industry remains one of the most resilient and fastest-growing segments of the national economy, contributing sustainably to GDP and job creation. An industry performance report (2017-2022) by the National Insurance Commission (NAICOM) shows a growth rate of 65.6% to the tune of ₦372.4bn in 2017, to ₦616.6bn in 2021. Presented by the head of statistics at NAICOM, the Commission stated that during the period, the rate of growth was put at 14.2% for 2017, 14.5% in 2018, and 19.2%, 1.2% and 19.7% for 2019, 2020 and 2021 respectively. Interestingly, the market recorded expansion in 2020 during the pandemic when the real GDP contracted (-1.9%) as was the case with most economies around the world. In 2021 for instance, while the annual rate of premium growth in Nigeria stood at 19.7%, it was 12% in Tanzania, 18.5% for Egypt, and about 7.6% in the emerging insurance market of Malaysia. The trend maintained a steady rise except in 2020 of which it took a v-shaped recovery thereafter, rebounded to about 20% in 2021 (Cookey, 2022).

NAICOM report (2022) states in 2022, the GPI stood at ₦223.8bn in the first quarter, which was 6% growth year on year (YoY), and ₦369.2bn in the second quarter, indicating a 65% quarter-on-quarter (QoQ) growth and at about 20% YoY. Outpacing the real economic growth which grew at just about 3.5% during the same period, major drivers during the period were the special risk insurance of marine and aviation at about 170% (169.6%), miscellaneous insurance at 98.4% and life insurance at 71.3%. In 2022 however, fire insurance (32.5%) and life business (24.5%) recorded the highest rates at the end of the H1 period, YoY (NAICOM, 2022).

Retention capacity in the Nigerian market has proved to be resilient, not only with regards to premium generation but the capacity to retain businesses, which signifies sound financial stability and carrying capacity. In tandem with the GPI growth, it

recorded a positive trajectory in business retention from ₦265.5bn to ₦441.2bn (66.2%) from 2017 to 2021, with the retention growth highest in marine and aviation, growing at 169.7% over the period while general accident insurance retention lagged at about 24.6% over the same period. This signifies the growing retention capacity of Nigerian insurers as the aggregate five-year retention ratio of the industry stood at 72.1% as the portfolios of motor (93.1%) and life business (91.8%) led the market. Even in 2020, the industry recorded a retention ratio of about 71.6%, higher than the advanced countries of Australia (69.4%) and Turkey (70.9%) and indeed the developing market of Egypt (58.1%), among others. In 2022, retention experience in the first half of life business retention was 93% while non-life recorded a ratio of 55% as the industry average stood at 70.5%. All non-life classes stood at an above-average position except for oil and gas (40.1%) even as it declined further compared to its retention capacity in the corresponding period (42.3%) of 2021 (Brooking, 2018).

Gross claims reported a fluctuation over the period to peak at a growing proportion of 36.2% over the years representing ₦336.8bn in 2021, from ₦186.4bn in 2017, owing to improved market discipline and the approach of customer-focused regulation, remained very high around the border of 70%. In 2019 however, while the gross claims reported declined by about 11%, the ratio of net claims paid stood at 69.3%. In all other years except 2017 (67%), it was at least around the border of 70%, with the highest recorded at about 84% in the H1 period of 2022. NAICOM report (2022) also states that in the pandemic year of 2020, despite macroeconomic challenges, about 70% of all reported claims were settled by insurers within the specified period, just as the industry also remained profitable with loss ratios within the average range numbers, with highest in 2018 at 59.2% (NAICOM, 2022).

In terms of size, the industry's sustained assets growth even during economic recessions, highest in 2020 (34.6%) indicates the immense investment flow and, due to recapitalization measures taken during that period the industry's total assets almost doubled over the five years of 2017 to 2021, depicting a positive interest of investors in the market at a time associated with macroeconomic volatilities. In 2022, the market recorded an expansion to about ₦2.3trn at the end of H1, growing at 12% YoY. From the ongoing, the insurance sector should be the future redeemer of the Nigerian economy given its growth rate, pattern, resilience, and yet untapped potential (Cookey, 2022).

The Nigerian government has implemented several measures aimed at strengthening the capital structure of the insurance industry in the country. In May 2019, the National Insurance Commission (NAICOM) announced a new recapitalization exercise for insurance companies in Nigeria. The exercise, which is aimed at increasing the minimum paid-up capital of insurance companies ensured that insurance companies have the financial strength to underwrite large risks and meet their obligations to policyholders. The deadline for compliance was extended to September 2021 (Bessler & Zimmermann, 2019). The government has also implemented a risk-based supervision framework to ensure that insurance companies have adequate financial resources to meet their obligations. Under the framework, insurance companies with higher risks will be required to hold higher levels of capital. The aim is to promote financial stability in the insurance industry and protect the interests of policyholders. (NAICOM, 2021). The government established NIRSAL in 2011 to address the lack of access to credit for smallholder farmers in Nigeria. NIRSAL provides guarantees and technical assistance to banks and other financial institutions to encourage lending to the agricultural sector. This has helped to promote the growth of agricultural insurance in Nigeria, as insurance companies have been able to develop new products to cover the risks faced by smallholder farmers (Lee & Lee, 2019).

Several measures have been taken by the Nigerian government aimed at improving the capital structure of the insurance industry and promoting financial stability. The government has not relaxed but established a framework for the development of new insurance products, which will help to increase insurance penetration, financial performance and promote financial inclusion in the country (Chen, Gao & Xiao, 2020).

Capital Structure refers to the firm's financial framework which consists of the debt and equity used to finance the firm. It is the way a firm finances its assets through the combination of equity, debt, or hybrid securities (Saad, 2015). In short, capital structure is a mixture of a company's debts (long-term and short-term), common equity, and preferred equity. Capital structure is essential for how firm finance its overall operations and growth by using different sources of funds (San & Heng, 2011). In finance, capital structure refers to how 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 bank overdraft and trade creditors. A firm's capital structure is then the composition of its liabilities (Saad, 2015). A company that has no debt, its capital structure is only equity and different companies have different capital structures (Pouraghajan, Malekian, Emangholipour, Lotfollahpour & Bagheri, 2012). In reality, the capital structure of a firm is difficult to determine. Financial managers have difficulties exactly determining the optimal capital structure. A firm has to issue various securities in a countless mixture to come up with particular combinations that can maximize its overall value which means optimal capital structure (San & Heng, 2011).

Organizations' sources of funding can be internal in the form of equity which includes paid-up share capital, share premium, and reserves, or external in the form of debts or both. According to Aziz and Abbas, (2019) in Nelson, Johnny, Peter, and Ayunku (2019), capital structure is the debt and equity mixture that organizations use to finance their business operations. Equity capital is typically provided or supplied by owners of the organization or firms and is usually in the form of ordinary shares. Whilst this form of financing is relatively cheap, continued use of it may result in dilution or loss of control by the original owners. Debt financing on the other hand ensures the maintenance of control but comes at a cost to the organization. According to Abor (2016) in Mukumbi, Eugine & Jinghong (2020), there is a relationship between the choice of capital structure by a company and its overall market value because this choice determines how the operating cash flows are shared between owners (shareholders) and debt holders. They posited that increased leverage by a company increases its value up to a point, beyond which any further increase raises the overall cost of capital and decreases its market value. Capital structure is considered a very important financial variable because it has a close relationship with the ability of a company to meet its obligations to various stakeholders: shareholders, employees, etc (Mukumbi et al., 2020)

It has been shown that capital structure choice decisions are important since there is no perfect market. But the extent to which this decision affects a company's market value is still a subject of debate. Against this backdrop, this research seeks to investigate the effect of capital structure and the financial performance of insurance companies.

NEED OF THE STUDY

Financial managers have complexity in determining the optimal or favorable capital structure. Nigerian insurance firms have had several constraints regarding how their capital ought to be structured. This is due to the legislation on minimum paid-up capital requirement and share deposit with the Nigerian central bank. These legislations influence deciding what the capital structure

should look like. Due to the uniqueness of the insurance industry, it operates in a dynamic environment, and claims from the insured are expected to fluctuate year to year it becomes tricky to know the optimal capital structure.

Insurance penetration in Nigeria is low compared to other countries. According to a report by PwC (2020), insurance penetration in Nigeria was 0.31% in 2020, compared to 0.68% in South Africa and 0.93% in Kenya. This low insurance penetration is due to low awareness and trusts in insurance products among Nigerians, as well as the high cost of insurance premiums (PwC, 2020). The distribution channels for insurance products in Nigeria are inadequate, with many Nigerians not having access to insurance products. This is due to the limited number of insurance companies in the country and the lack of innovative distribution channels that can reach more customers. The insurance industry in Nigeria has a weak regulatory framework, with many insurance companies not complying with regulations. This has led to a lack of trust in the industry, as well as the low uptake of insurance products by Nigerians (NAICOM, 2022).

Moreso, many insurance companies in Nigeria have an inadequate capital base, which limits their ability to underwrite large risks and meet their obligations to policyholders. This has led to a lack of confidence in the industry by investors and potential customers. The claims settlement process in Nigeria is slow and inefficient, which has led to a lack of confidence in the industry. Many Nigerians are reluctant to take out insurance policies due to the perception that insurance companies do not pay claims promptly thereby affecting the financial performance of these firms.

Overall, these challenges have hampered the financial performance of the insurance industry in Nigeria. Addressing these challenges will require a concerted effort by the government, insurance companies, and other stakeholders in the industry. It is on this note that the researcher purposed to undertake this study to test and examine the relationship between capital structure and financial performance of insurance companies.

LITERATURE REVIEW

Generally, capital structure of a company determines the ownership structure of the company. That is, it shows how much of the company's sources of funding is provided by the owners who have last claim in the event of a liquidation versus how much of it is provided or covered by debts or creditors who have first claim in the event of a liquidation. There are different rewards and incentives to the two major components of the capital structure. Whereas equity shareholders exert control over the company, their earning is not fixed and secured, they are only paid where a company makes profit and declares dividend. All other funds provided have to be paid first before equity shareholders are. Debt holders on the other hand have fixed earnings in form of interest whether the company makes profit or not as stipulated by the contract. They do not share in the risk of the business and are settled first in the event of a liquidation. Therefore, the question of finding a balance or an optimal capital structure for a company is an important one for management. When a company is financed entirely by equity, all its resultant profit or cash flows will go to the equity shareholders. When its financing is a mixture of debt and equity, its profits or cash flows are shared between equity stockholders and the debt holders, with the debt holders getting a fixed amount, while the equity stockholders get the residual amount depending on the overall performance of the business.

According to Ross et al. (2015) the capital structure of a firm refers to the way it finances itself from various sources of financing. These sources could be fully debt or even fully equity or a percentage of each. Capital can also be referred to the initial investment a company uses to start of a business. There are different ways a firm can source for its capital. It can be through debt, equity or both. The capital structure of a firm gives investors, stakeholders an idea of how a company is financing itself. It depicts how its operations and growth have been financed using the various sources of capital available to the firm. Debt can be sourced externally, it can be long-term that is to be repaid much later that is three years and above and short term which is expected to be repaid in the next one or three years depending on the agreement between the firm and the lender.

Financial performance of a firm is a subjective measure of how well a firm can use its assets to generate revenues. Erasmus (2008) noted that financial performance measures like profitability and liquidity among others provide a variable tool to stakeholders to evaluate the past financial performance and current position of a firm. Padachi (2006) argues that a financial management that is well planned and put into action will result to increase in firm's value. Financial performance of a firm is the level with which a firms financial goals are achieved. It's the process by which the result of a firm is measured in terms of monetary value. It's a measure used to gage the success of a firm and it can be used for comparison purpose. A firm's financial performance is crucial in its existence. How effective and efficient a firm is in managing its resources for operations financing and investing activities is clearly depicted in its high performance (Naser and Mokhtar, 2014). One of the measures of financial performance includes analyzing financial statements. These statements provide information to management on available resource and how they were financed and what the company accomplishes with them.

Performance of insurance company in financial terms is normally expressed in net premium earned, profitability from underwriting activities, annual turnover, return on investment and return on equity etc. These measures can be classified as profit performance measures and investment performance measures. Profit performance includes the profits measured in monetary terms. It is the difference between the revenues and expenses. Investment performance can take two different forms. One the return on assets employed in the business other than cash, and two, return on the investment operations of the surplus of cash at various levels earned on operations. All the financial measures mentioned pertain to the efficiency of operations (Kasturi, 2006). Financial performance is understood in terms of various financial ratios, which are divided as profit performance measures and investment performance measures.

Padachi (2006) argues that a financial management that is well planned and put into action will result to an increase in firms' value. Financial performance of a firm is the level with which a firm's financial goals are achieved. It's the process by which the result of a firm is measured in terms of monetary value. It's a measure used to gage the success of a firm and it can be used for comparison purposes. A firms' financial performance is crucial in its existence. How effective and efficient a firm is in managing its resources for operations, financing and investing activities is clearly depicted in its high performance (Naser & Mokhtar, 2014). The relationship between capital structure and financial performance of organizations has been a subject of debate for a long time following the irrelevance of capital theory as propounded by M&M in 1958. So many researches have been undertaken in this area with vary diverse findings. Much of the controversy around this area started with M&M capital structure irrelevance theory. According to M& M publication of 1958, under certain conditions, the market value of a company is not influenced by or dependent on its capital structure. This theory assumes the existence of a perfect market where there are no taxes, transactions costs or bankruptcy costs. It also works with the assumption that abundant information exists for all persons who need information about a

company (Ahmeti & Prenaj; 2015). The M&M theory suggests the existence of a fully efficient or perfect market. In reality however, there is no perfect market in the world and transactions have a cost. The controversies around the irrelevance of capital structure theorem of Modigliani and Miller (1958) has led to the development of several other theories of capital structure some of which focus on the cost and others on the benefits of different finance sources. Some of these theories are: the trade-off theory, the pecking order theory, market timing theory and agency cost theory Iqbal et al (2012). Tian and Zeitun (2007) however, argue that capital structure of companies and corporate performance are closely related or interlinked. By and large studies have shown that the relationship between a company's capital structure and its financial performance is a mixture of positive and negative depending on the place, size, and industry Aljamaan (2018).

RESEARCH METHODOLOGY

Population and Sample

The population of this research will be the whole insurance industry in Nigeria. There are 66 insurance companies in Nigeria grouped into 5 categories; 13 Composite insurance (life and non-life business), 29 general insurance businesses, 17 life insurance businesses, 3 reinsurance businesses and 4 companies transacting Takaful business (NAICOM, 2023).

The research sampled ten (10) insurance companies listed in the Nigerian Stock Exchange (NSE). The relevant annual data were collected on Return on Equity (ROE), components of capital structure; Debt Capital (DC), Equity Capital (EC) and Preferential Shares (PS) and number of existing insurance companies in Nigeria for the model. The sampling technique is based on a set of criteria that the firms must not be delisted during the study period and availability of data in the annual financial reports of the such insurance firm between 2010-2022

Data and Sources of Data

Data was sourced from secondary sources. Secondary data is data which has been collected by individuals or agencies for purposes other than those of our particular research study (Onwumere, 2015). The justification for the use of secondary data in this research is that; it is available which is entirely appropriate and wholly adequate to draw conclusions and answer the question or solve the problem. Therefore, the data used for this research was generated from the CBN Statistical Bulletin for 2022, the National Bureau of Statistics for 2022, and NAICOM 2022.

Statistical Tool

The statistical tool adopted for this study was a Panel regression analysis to examine the relationship between Capital Structure and Financial Performance. It helps in predicting the value of the dependent variable based on the values of the independent variables. Also, Time series analysis was used to analyze data collected over time (2010-2022) to identify patterns, trends, and seasonal variations.

Decision Rule: Reject the null hypotheses if the probability value of the F-statistic is less than 0.05 (5%) level of significance.

Model Specification

It is therefore worthy of note that variables for the study constitutes the dependent and independent variables. The dependent variable which is financial performance is measured using Return on Equity (ROE) and the independent variables are measured using Debt Capital (DC), Equity Capital (EC) and Preferential Shares (PS).

Its functional relationship is represented as follows:

$ROE = f(DC*, EC*, PS*)$

$GDP = \beta_0 + \beta_1 DC + \beta_2 EC + \beta_3 PS + U_t$

This is further written as a regression equation thus;

Where;

ROE = Return on Equity (Financial Performance)

DC = Debt capital

EC = Equity capital

PS = Preferential shares

β_0 = autonomous intercept

β_1 = coefficient of debt capital

β_2 = coefficient of equity capital

β_3 = coefficient of preferential shares

U_t = Disturbance term

The model is expressed in natural log to make it easier to be estimated using the ordinary least square method which assumes a linear relationship between variables.

Thus, the **a *priori*** expectation is stated symbolically as: β_1, β_2 and $\beta_3 > 0$.

Method of Data Analysis

The Panel Regression analysis was used to test the hypotheses stated in this study. Regression is concerned with the study of the dependence of one variable, the dependent variable, on one or more other variables, the explanatory variables, with a view to estimating and/or predicting the population mean or average value of the former in terms of the known or fixed (in repeated sampling) values of the latter (Gujarati and Porter, 2009). Again, regression analysis is used in modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables (Onwumere, 2015). Most commonly, regression analysis estimates the conditional expectation of the dependent variable given the independent variables that is, the average value of the dependent variable when the independent variables are held fixed.

DATA PRESENTATION AND ANALYSIS
Estimation Procedure

Hausman Test

Hausman test was conducted to identify the appropriate panel regression model and it recommended the random effect model as the most efficient to be used since the Probability value of Hausman test of 0.3100 is greater than 0.05 (Prob 0.3100 > 0.05), which is not significant and rejecting the fixed effect model in favour of random effect model.

Table 1: Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	54.879594	3	0.3100

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
DC	0.533112	0.481530	0.002258	0.0077
EC	0.647069	1.043480	0.003426	0.0000
PS	3.326603	-12.237112	2.810442	0.0000

Source: Researcher's computation with Eviews 10

Hausman test was conducted to differentiate between random and fixed effect models. The null hypothesis is random effect being the true model. The p-value of Hausman test is 0.3100 rejecting the fixed effect model. Based on the above data analysis, we come to a conclusion that random effect is the appropriate model.

Panel Regression Technique

Panel Regression Analysis was used since the study covered data over a period of eight years and Hausman test was conducted to identify the appropriate panel regression model and it recommended the random effect model as the most efficient to be used since the Probability value of Hausman test is greater than 0.05 (Prob 0.3100 > 0.05), which is not significant and rejecting the fixed effect model. Thus, the Panel regression result wilt random effect is presented in table 2.

Table 2: Panel regression result wilt random effect

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 6/7/2023   Time: 00.06
Sample: 2010 2022
Periods included: 12
Cross-sections included: 10
Total panel (balanced) observations: 120
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.79204	1.127972	18.43312	0.0000
DC	0.481530	0.092461	5.207928	0.0000
EC	1.043480	0.160534	6.500059	0.0000
PS	12.23711	2.148050	5.696847	0.0000

Effects Specification		S.D.	Rho
Cross-section random		0.603922	0.2339
Idiosyncratic random		1.093047	0.7661

Weighted Statistics			
R-squared	0.755794	Mean dependent var	13.96333
Adjusted R-squared	0.728583	S.D. dependent var	1.974523
S.E. of regression	1.492584	Sum squared resid	133.6683
F-statistic	16.75076	Durbin-Watson stat	1.858610
Prob(F-statistic)	0.000000		

Source: Researcher's computation with Eviews 10

From the Panel regression result wilt random effect in table 2, the result revealed that DC which is Debt capital had a positive relationship with the ROE with the coefficient of 0.481530 and also significant as its probability value stood at 0.0000 which is less than 0.05. This implies that a unit increase in the Debt capital (DC) will enhance financial Performance (ROE) of the insurance companies by 0.481530. The result further affirmed that at 1% level and 5% level of significance, Equity Capital had a positive relationship with ROE with the coefficient of 1.043480. This indicates that a unit increase in the Equity capital (EC) will enhance financial performance (ROE) of insurance company by 1.043480.

More so, positive relationship was established between preferential share (PS) and financial performance (ROE) of the insurance companies with the coefficient of 12.23711 and statistically significant with the probability value of 0.0000. This connotes that the more the preferential share, the more ROE. Thus, from the Panel regression result, the multiple regression equation becomes:
ROE= 20.79204 + 0.481530DC + 1.043480EC +12.23711PS

Furthermore, the Panel regression result revealed that the coefficient of determination (R^2) stood at 0.755794. This implies that, 75.6% of the proportion of the total variation observed in the dependent variable (ROE) was explained by the explanatory or independent variables (DE, EC and PS) in the model and unexplained variation was 24.4%. The probability value of F-statistic which measured the joint statistical influence of the explanatory variables in explaining the dependent variables stood at 0.0000. This affirmed the influence of the DC, EC and PS to be statistically significant at 1% and 5% level of significance. The Durbin Watson (DW) test result with the value of 1.8586 revealed the absent of positive serial correlation since its approximately to 2.

TEST OF HYPOTHESES

Hypothesis One

Hypothesis one is restated as;

H0₁: Debt Equity (DE) has no significant effect on the financial performance of insurance company.

Decision Rule: if the probability value is less than 0.05% level of significance, reject null hypothesis in favour of alternative hypothesis and conclude that Debt Equity (DE) has significant effect on the financial performance (ROE) of insurance company. Otherwise, accept null hypothesis and conclude that Debt Equity (DE) has no significant effect on the financial performance of insurance company.

The Panel regression result revealed that there was a positive and significant relationship between Debt Equity (DE) and financial performance of insurance company with the coefficients of 0.481530. This implies that a unit increase in debt equity will lead to about 48% improvement in the financial performance of insurance company. The probability values of DE stood at 0.0000 which was less than 0.05% level of significance. Hence, null hypothesis is rejected in favour of alternative hypothesis and conclude that Debt Equity (DE) had significant effect on the financial performance (ROE) of insurance company.

Hypothesis Two

Hypothesis two is restated as;

H0₂: Equity Capital (EC) has no significant effect on the financial Performance (ROE) of Insurance company in Nigeria.

Decision Rule: if the probability value is less than 0.05% level of significance, reject null hypothesis in favour of alternative hypothesis and Equity Capital (EC) has significant effect on the financial Performance (ROE) of Insurance company in Nigeria. Otherwise, accept null hypothesis and conclude that Equity Capital (EC) has no significant effect on the financial Performance (ROE) of Insurance company in Nigeria.

The Panel regression result revealed that there was a positive and significant relationship between Equity capital (EC) and financial performance (ROE) of insurance company in Nigeria with the coefficients of 1.043480. This implies that a unit increase in equity capital will lead to 1.043480 improvement in financial performance (ROE) of insurance company. The probability values of Equity capital stood at 0.0000 which was less than 0.05% level of significance. Hence, null hypothesis is rejected in favour of alternative hypothesis and conclude that Equity Capital (EC) had significant effect on the financial Performance (ROE) of Insurance company in Nigeria.

Hypothesis Three

Hypothesis three is restated as;

H0₃: Preferential share (PS) has no significant effect on the financial performance (ROE) of insurance company in Nigeria.

Decision Rule: if the probability value is less than 0.05% level of significance, reject null hypothesis in favour of alternative hypothesis and Preferential share (PS) has significant effect on the financial Performance (ROE) of Insurance company in Nigeria. Otherwise, accept null hypothesis and conclude that Preferential share (PS) has no significant effect on the financial Performance (ROE) of Insurance company in Nigeria.

The probability values of Preferential Share stood at 0.0000 which was less than 0.05% level of significance. Hence, null hypothesis is rejected in favour of alternative hypothesis and conclude that Preferential Share (PS) had significant effect on the financial Performance (ROE) of Insurance company in Nigeria.

Discussion of Findings

The Panel regression result in table 2 revealed Debt Equity has positive relationship with the financial performance of insurance company in Nigeria with the coefficient of 0.481530. The probability value of 0.0000 revealed the significance of debt equity (DE) on financial performance (ROE) of insurance company in Nigeria. The implication of the above result is; debt equity has capability of transforming and enhancing the financial performance (ROE) of insurance company in Nigeria which is in line with apriori expectations. This result is consistent with the findings of Bhupal (2020) and Gundu (2020) who both examined the relationship between capital structure and the financial performance of insurance companies.

Results further shows a positive relationship between equity capital and the financial performance of insurance company in Nigeria with a coefficient of 1.043480. it has a probability value of 0.000 which revealed the significant of equity capital on

financial performance (ROE) of insurance companies in Nigeria. This finding is consistent with Gundu (2020) who evaluated the effect of capital structure on financial performance of quoted composite insurance companies in Nigeria. Findings from the study indicate that there is a positive relationship between return on equity and Debt to equity ratio, i.e. increase in debt to equity ratio leads to increase in return on equity.

Also, findings shows that positive relationship exist between preferential shares and the financial performance of insurance company in Nigeria with a coefficient of 12.3711. It also has a probability value of 0.000 which revealed the significant of preferential shares on financial performance (ROE) of insurance companies in Nigeria. This finding is in line with the work of Zahid (2016) who used the Granger causality test, fully modified least square (FMOLS), and panel least square fixed ransom to appraise the long and short run connection among Crude ratio, Assets return, Firm Size and Long-term debt ratio. This result suggests that a company that can easily turn it assets to cash would have lower preference for debt in the short term.

The F-statistic which measured the joint statistical influence of the explanatory variables in explaining the dependent variables with a P-value of 0.0000, affirmed the influence of the explanatory variables to be statistically significant at 1% and 5% level of significance. The Durbin Watson (DW) test result with the value of 1.88 revealed the absent of positive serial correlation since its approximately to 2. Hausman test to differentiate between random and fixed effect models. The null hypothesis is random effect being the true model. The p-value of Hausman test is 0.3100 rejecting the fixed effect model. Based on the above data analysis, we come to a conclusion that random effect is the appropriate model. The unobservable factors do not significantly affect the probabilities of coefficients. As a result, the OLS and random effect equations are the best models to explain the effect between independent and dependent variables across time. From the information of the cross-sectional random effects test comparisons table, we can also get that all the independent variables are significant in explaining the effect of capital structure on financial performance of selected insurance companies in Nigeria.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The main objective of this study was to find out the effect of capital structure on the financial performance of insurance companies in Nigeria. Based on the specific objectives of this study and the result of the hypotheses tested, the findings of this study are summarized below;

1. Results from the test of hypothesis one shows positive significant relationship between Debt Equity (DE) and financial performance of insurance company. The probability values of Debt Equity (DE) stood at 0.0000 which was less than 0.05% level of significance. Hence, null hypothesis is rejected in favour of alternative hypothesis

2. Results from the test of hypothesis two shows positive significant relationship between Equity Capital (EC) and financial performance of insurance company. The probability values of Equity Capital (EC) stood at 0.0000 which was less than 0.05% level of significance. Hence, null hypothesis is rejected in favour of alternative hypothesis

3. Results from the test of hypothesis three shows positive significant relationship between Preferential Shares (PS) and financial performance of insurance company. The probability values of Preferential Shares (PS) stood at 0.0000 which was less than 0.05% level of significance. Hence, null hypothesis is rejected in favour of alternative hypothesis

Conclusion

Based on the empirical results, the following conclusion was drawn. The study concluded that;

1. Debt Equity (DE) relates positively with the financial performance of insurance companies
2. Equity Capital (EC) has a relationship with the financial performance of insurance companies and
3. There is a relationship between Preferential Shares (PS) and the financial performance of insurance companies in Nigeria.

Recommendations

Based on the discussed findings on the study above on the effect of capital structure on the financial performance of insurance companies in Nigeria, the following recommendations are provided;

1. Insurance companies should consider optimizing their Debt Equity Ratio to improve their financial performance. The positive relationship suggests that a higher level of debt in proportion to equity is associated with better financial performance. However, it is essential to strike a balance and avoid excessive leverage that could increase financial risk. Conduct a thorough analysis of the optimal DE ratio by taking into account the insurance industry norms, regulatory requirements, and the company's risk tolerance.

2. Insurance companies should focus on strengthening their Equity Capital to improve their financial performance. The finding suggests that a higher level of equity capital is associated with better financial performance. This can be achieved by attracting additional investments from shareholders, retaining earnings, or seeking equity financing options. Strengthening the equity capital base provides a cushion against financial risks and enhances the company's solvency and stability.

3. Finally, insurance companies should consider strategically utilizing Preferential Shares to enhance their financial performance. The finding suggests that the use of Preferential Shares is associated with improved financial performance.

Preferential Shares can offer various advantages, such as providing additional capital, increasing financial flexibility, and attracting specific types of investors.

Suggestions for Further Studies

This research examined the effect of capital structure on financial performance of insurance companies, future studies can examine other capital structure components and their contributions to the financial performance of insurance companies. Furthermore, future researchers can examine other variables mix to determine their influence on financial performance of insurance in Nigeria.

Contributions to Knowledge

1. Empirically this study contributes to the existing body of knowledge by providing empirical evidence on the relationship between capital structure and the financial performance of insurance companies in Nigeria.
2. The study identifies and examines some specific constructs attributable to capital structure which are; Equity Share, Debt Capital and Preferential Shares and provides insights into understanding their relationship with the financial performance of insurance companies.

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APPENDIX

Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	54.879594	3	0.3100

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
DC	0.533112	0.481530	0.002258	0.0077
EC	0.647069	1.043480	0.003426	0.0000
PS	3.326603	-12.237112	2.810442	0.0000

Panel regression result wilt random effect

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 6/7/2023   Time: 00.06
Sample: 2010 2022
Periods included: 12
Cross-sections included: 10
Total panel (balanced) observations: 120
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.79204	1.127972	18.43312	0.0000
DC	0.481530	0.092461	5.207928	0.0000
EC	1.043480	0.160534	6.500059	0.0000
PS	12.23711	2.148050	5.696847	0.0000

Effects Specification		
	S.D.	Rho
Cross-section random	0.603922	0.2339
Idiosyncratic random	1.093047	0.7661

Weighted Statistics			
R-squared	0.755794	Mean dependent var	13.96333
Adjusted R-squared	0.728583	S.D. dependent var	1.974523
S.E. of regression	1.492584	Sum squared resid	133.6683
F-statistic	16.75076	Durbin-Watson stat	1.858610
Prob(F-statistic)	0.000000		