Capital Structure, Financial Stability and Performance of Insurance Companies in Nigeria

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ABSTRACT

This study examines the effect of capital structure and financial stability on the financial performance of selected insurance companies in Nigeria, focusing on the return on capital employed (ROCE) as the performance measure. The study adopted an ex-post facto research design, and data were collected from the annual reports of the selected insurance firms. Using panel data analysis, the impact of debt-to-equity ratio, total debt, and total equity on ROCE was assessed. The findings revealed that the debt-to-equity ratio had a significant effect on ROCE, indicating that the balance between debt and equity influenced profitability and capital efficiency. Total debt also significantly affected ROCE, suggesting that excessive borrowing increased financial risk, while strategic debt usage enhanced returns. Furthermore, total equity showed a significant positive relationship with ROCE. The study concludes that a balanced capital structure was essential for sustaining profitability and recommended moderate debt levels and strengthened equity financing strategies. Therefore, it was recommended that insurance firms were encouraged to maintain a well-balanced capital structure, ensuring debt was used moderately to avoid excessive interest burdens and financial strain.

Keywords: Capital Structure, Debt-to-equity ratio, Total debt, Total equity, Performance.

INTRODUCTION

Nigerian insurance sector has a significant role in financial stability of the country through risk mitigation, promote savings and investments thus facing difficult economic situations in the form of inflation, insecurity, and uncertainty (Antwi, et. al., 2024). The insurance companies also donate to the infrastructural development and development of the capital market besides promoting financial inclusion. Nevertheless, the low penetration, regulatory weaknesses, minimal consumer confidence, and inefficient capitalization still constrain the growth of the industry (Okiche, et. al., 2022).

Stability here is the capacity of the insurers to cover the long-term risks and survive through economic fluctuations and shocks (Kwok, et. al., 2023), and performance can be counted in measures not only financial, including ROA, ROE, and underwriting profit, but operational, including claims efficiency and customer retention (Tudose, et. al., 2022). The immediate influence on these results comes through the capital structure cost which is defined as the combination of debt and equity financing (Nguyen, et. al., 2020). The trade-off theory weighs advantages of debts and the risks of financial distress, whereas the pecking order theory takes into consideration priorities between internal and external financing. Debt in the Nigerian context of high interest and volatile currency environment is expensive, but capital could only be raised through equity which can lead to ownership dilution. The best capital structure is necessary to increase profitability, solvency ability, and competitiveness. The lack of innovative and efficient operations is additionally emphasized in the sector challenges which include strong traditional product dependency, heavy claims ratio, and lack of awareness among the population (Sulaimon et al., 2020; Tuffour et al., 2021). NAICOM works on regulatory reforms in ensuring capital adequacy requirements and corporate governance (Iroh, et. al., 2024).

Potential risks, due to cyber threats, natural climatic issues or geopolitical wrangles, prove the reason that supports strong capital buffers (Dugbartey, 2025). Compared with peers, the profitability, claims settlement, and solvency of those firms with well-structured portfolios of capital are better (Kihara, 2024). This study

therefore examined the relationship between capital structure and the stability and performance of Nigerian insurers, offering insights to guide corporate strategy, investment decisions, and regulatory policy toward sustainable growth.

Statement of the Problem

Nigerian insurance is therefore so fundamental in financial intermediation and economic stability whereby the industry is still recording performance challenges especially in Return on Capital Employed (ROCE) which is a long run measure of viability, profitability and efficiency. Nigerian insurance markets did not only trail other regional and global markets, but the insurers also failed to strongly compete due to their concerns about their capital efficiency and strategic management (Flammer, et. al., 2021).

According to the information provided by the National Bureau of Statistics (2022), the average ROCE was between 0.5 and 1.8 in the last five years, significantly lower than in such countries as Kenya or South Africa where it was above 3 percent. Such low performance is an indicator of inefficiency in asset use, poor investment policies, and underwriting (Mwangangi, 2020). Most companies have conservative portfolios, which contain a higher extent of low yield government securities, restricting returns (Kavadis, et. al., 2023). ROCE has been in decline since 2017, that is, 6.4 percent in 2017 to 3.9 percent in 2021 (Oloke, 2023), even at the face of recapitalization efforts, which points to the fact that an increase in capital does not necessarily bode better profitability (Bellingan, et. al., 2024). The trends show a structural problem associated with choices of capital structure. Although debt can save money on taxes, it also can raise the financial risk, but if too much equity capital is used, it dilutes the profits (Aris, et. al., 2021). Conservative debt policies among many insurers, owing to the high borrowing costs, constraints in credit, and regulatory requirements, worsen their capital efficiency even more (Carmody, et. al., 2022).

The 2020 NAICOM recapitalization regulation aims to increase the level of financial stability through increased minimum paid-up capitalization, meaning that measures toward such have yet to reflect in the performance behaviors of most companies (Oluwaleye, et. al., 2023). This begs the question of whether the insurers are managing to maximize the capital mix to increase returns (Ahmed, et. al., 2024). Weak values of ROCE, ROA, and equity returns suggest that the exemplified issue of financial performance must be studied in respect to capital structure choices. Such analyses are required or otherwise, reforms in regulations and management strategies can end up with suboptimal effects. This research thus captures one of the major gaps as it analyzes the role of capital structure in defining stability and profitability of the insurance firms in Nigeria. Therefore, this study examines the impact of capital structure on the stability and performance of selected insurance companies in Nigeria with the specific objectives used to form the research questions and hypothesis:

Research Questions

The following questions were formulated to achieve the objectives of the study:

1. What is the impact of debt-to-equity ratio on return on capital employed (ROCE) in selected insurance companies in Nigeria?
2. To what extent does total debt have impact on return on capital employed (ROCE) in selected insurance companies in Nigeria?
3. How does total equity have impact on return on capital employed (ROCE) in selected insurance companies in Nigeria?

Research Hypotheses

To achieve the objectives, the following hypotheses were formulated:

$H_0$1: Debt-to-equity ratio has no significant impact on return on capital employed (ROCE) in selected insurance companies in Nigeria.

$H_0$2: There is no significant impact between total debt and return on capital employed (ROCE) in selected insurance companies in Nigeria.

$H_0$3:Total equity has no significant impact on return on capital employed (ROCE) in selected insurance companies in Nigeria.

LITERATURE REVIEW

Capital Structure

The capital structure is the system of using various debt and equity combinations available to a firm in financing its operations and expansion plans, which is crucial in the financial stability, the cost of capital, and the entire company performance. The ideal structure considers the advantages of using debt, including a tax shield, against the threat of financial distress and bankruptcy (Okoye, et. al., 2021). Since insurers have a tendency towards high-risk underwriting and long-term liability, the proper balance between the debt and equity is paramount to stay strong. Leverage can be beneficial in increasing firm value when debt is used effectively, but a high number of debts increases the risk when an economy experiences turbulence (Musa, et. al., 2022). There are also firm-specific aspects of finance decision including size, profitability, asset tangibility and future growth prospects (Uzoegbu, et. al., 2021). Due to the limited availability of long-term debt in Nigeria, insurers resort to equity funding, and the trade-off theory is used to balance it (Ezeaku, et. al., 2020). The fact that regulatory interventions, including the recapitalization directive by NAICOM, continue to make capital structure a governance and compliance decision, further shows that the decision of capital structure is strategic (Adediran, et. al., 2023).

Debt-to-Equity Ratio

Debt-to-Equity Ratio (DER) is used to calculate the ratio between the total debt incurred by the firm in comparison with the shareholder's capital; it is an important metric of debt leverage and risk. To an insurance company, DER indicates whether the assets have been financed using debt or equity and the extent of using borrowed capital. Its more DER can also raise the benefits as tax incentive but also the increase of a financial risk, especially where there is an economic downturn (Adeleke, et. al., 2022). The optimal level of DER in the Nigerian context is important in both performance and regulatory compliance since the National Insurance Commission (NAICOM) oversees the capital adequacy and solvency. Having too much leverage may result in the default risk and loss of credibility, which will scare away investors (Owolabi, et. al., 2021). On the other hand, levels of balanced DERs increase both resilience and long-term stability. Considering that the industry has a long-term liability structure and the required liquidity, DER must correspond to the risk tolerance, the approach to investment, the standards of regulation (Uche, et. al., 2023). Recent geo-macroeconomic volatility has also induced Nigerian insurers to become more conservative in the application of leverages.

Total Debt

All interest-bearing obligations worth short or long terms included in financing operations and enhancing capacity, funding investment, or just investing in the provision of funds during economic downturns comprise total debt. In the case of insurance companies, it is one of the most important factors that influence the determination of financial leverage, operational risk and long-term sustainability (Bello, et. al., 2021). In markets that have limited access to equity or under-capitalized internally, insurers tend to use different forms of debt as a source of funds. Though low levels of debt are appropriate as they indicate improved access to capital, contribute to the underwriting, and facilitate technology investments (Okonkwo, et. al., 2022), high levels of it predispose it to vulnerability (increased vulnerability under high-interest rates or negative profitability). Such risks are enhanced by economic fluctuations and inflation in Nigeria. The key solvency measure, debt-to-equity ratio, also falls under the influence of the total debt amounts that are thoroughly watched by analysts and regulators. Due to the recapitalization exercise by the NAICOM, most insurers turned to the use of bonds and credit lines, and this reason is why they should have a relative level of debt, which should be optimal in terms of both growth prospect and financial strength (Adebayo, et. al., 2023).

Total Equity

Total equity provides the reserves value of asset after liabilities, this amount signifies the demands on shareholders; it is made up of retained earnings, share capital, reserves. It is a major sign of financial capability, underwriting capability and long-term sustainability of an insurance firm (Adegbite, et. al., 2021). The capital-intensive nature of the insurance sector in Nigeria makes it obligatory to enforce the minimum equity that insurers must obtain to have sufficient capabilities of claims, and absorption shock as required by NAICOM (NAICOM, 2022). A quality that is associated with increased equity is that this improves creditworthiness, as it decreases indebtedness and it improves the risk-bearing capacity. They have been shown to be more profitable, have superior underwriting and even customer trust among the well-capitalized insurers (Uche, et. al., 2023). Equity is also essential to cushion against any losses incurred in operations and economic recession (Okafor, et. al., 2020). The new governance changes involving recapitalization policies implemented by NAICOM have encouraged the firms to increase equity either by merging with other firms, taking acquisitions, or injecting new capital. These policies are meant to develop a more durable, competitive, and appealing insurance market of investment and facilitate not only the stability of the industry but also of the economy at large.

Performance

Performance in insurance firms can be broken down as the capability of insurance firms to reduce the financial goals, stakeholder expectations and sustainability. It can be evaluated through financial indicators like Return on Capital Employed (ROCE) that determines the level of efficiency with which the funds translate into profit and value to the policyholders and shareholders (Okoye, et. al., 2021). Competition, more stringent regulatory environment, and adjusting demands of consumers are also pivotal benchmarks in the context of performance being an issue associated with nigh-on solvency and policyholder satisfaction in the case of Nigeria, according to NAICOM. When it performs well, that enhances the trust of the population in an industry whose penetration has been low (Adebayo, et. al., 2022). These performance indicators are used to make strategic steps, manage costs, and assess the level of profits, and investors show preference to the companies that are regularly performing high (Uzochukwu, et. al., 2023). Nonetheless, some issues in the sector, such as low capital bases, unstable macro economy, low trust still take place. Insurers are meeting these by enhancing their governance, underwriting standards and adopting technological efficiency practices and remaining compliant, competitive and achieving sustainable growth in a dynamic process of changes in financial service industry.

Return on Capital Employed

Return on Capital Employed (ROCE) is a metric that calculates the efficiency of the company to achieve profits using its total capital, including debt and equity and has a wider picture than ROA, or ROE, which requires a particular component of capital (Adewuyi, et. al., 2021). In the Nigerian insurance industry, which is faced with fluctuating economic profits and the increasing regulatory pressure regarding the amount of capital held, ROCE is crucial in determining simply whether or not they are profitable or not considering every available long-term capital they have. It allows the stakeholders to establish whether capital (contributed by creditors and shareholders) is worthwhile or not. Companies that are constantly maintaining a high ROCE tend to exhibit good management, sustainable growth and high efficiency in premium collection, underwriting and investment (Musa, et. al., 2022). Regulators such as NAICOM also apply the ROCE to measure the sustainability of the sector particularly when recapitalization measures are put in place. Since it corrects capital differences, ROCE enables comparisons across firms and thus enables investors to be aware of insurers that both generate long-term value and exercise economies in their resources management processes-it is an essential indicator of the health of operations and finance.

THEORETICAL REVIEW

Trade-Off Theory

Kraus, et. al. (1973) developed the trade-off theory of capital structure explaining the balance between debt tax advantage and cost of these financial arrangements (related to financial distress and bankruptcy, as well as

agency costs). Firms seek to maximize the value of the firm, by comparing the marginal tax benefit of debt financing with the marginal cost of default in the long run tending to settle on an optimal or target debt ratio. This theory is particularly applicable to the regulated industry such as insurance where there is a requirement of solvency and regulation. The research conducted by Ogboi, et. al. (2020), as well as Enekwe, et. al. (2021), reveals that profitable companies tend to deploy more debt, and Nigerian firms use leverage to keep their financial health in decent condition. One of the strong points is that it can integrate real-life factors including taxes, the risk of bankruptcy, and agency costs and provide a flexible framework to make balanced debt-equity decisions (Adegbite, et. al., 2021). It also conforms to practical behaviour in controlled sectors (Olayemi, et. al., 2023). Nevertheless, it has low explanatory strength in volatile/ undeveloped markets, where the supposition of rationality and dependable data procurement might go wrong (Onwuka, et. al., 2023). It does not consider behavioural and institutional limitations as well (Ezeani, et. al., 2023). Nevertheless, these weaknesses still mean that theory can play an important role in the way corporate financing decisions are comprehended.

Pecking Order Theory

According to the pecking order theory with its addition by Donaldson (1961) and formalization by Myers, et. al. (1984), there is a least cost priority way of financing firms with retained earnings given the first priority, followed by debt and then equity. Such a precedence is a result of information asymmetry since the issuance of equity can indicate overvaluation causing stock prices to decline. This order is common in Nigerian insurance companies, and they use the retained earnings instead of going externally before using the money (Okoli, et. al., 2021). The prevalence of the incidence in Nigerian firm is proved with empirical research of Alabi, et. al. (2022) and Omodero (2020), where it is found to be widespread, particularly in volatility.

The advantage of the theory that could be applied in times of crisis is that it increases control and decreases agency costs (Uchenna, et. al., 2022). Nevertheless, it presupposes universal chain of command and disregards the market timing, company features, and regulatory demands. Otherwise, the outside financing might be required in capital-intensive industries such as the insurance industry (Adepoju, et. al., 2021). Therefore, it can be influential, but it should be used together with another model of capital structure.

Signaling Theory

Bhattacharya (1979) offered Signaling Theory to describe how a company deceives with the help of the dividend policy Signaling theory, coming up with Spence (1973) and applied to corporate finance, asserts how a firm uses numerous financing choices as vehicles to talk about its distressed status in presence of informational asymmetry. Managers with their superior understanding value of the firm use debt or equity issues to communicate either optimistic or pessimistic information. Overall, debt is considered to be a positive indicator of future cash flow generation whereas the issuance of equity can imply overpricing or inadequacy of internal sources of funds (Okoye, et. al., 2021). Debt is used by Nigerian insurance companies as a strategic indicator of financial security (Adekunle, et. al., 2020; Ibrahim, et. al., 2022).

The theory has been applied especially in developing markets that experience low transparency, and financing decisions serves as a proxy of firm health (Okafor, et. al., 2021). Nevertheless, the homogeneity in signal interpretation is an issue for it; in the case of Nigeria, the lack of regulatory uniformity, and market noise may undermine debt signal predictive power (Adebayo, et. al., 2022). Therefore, fruitful as it is, it becomes relevant in an efficient market and institutional setting.

Empirical Review

Shaik et al. (2022) investigated determinants of the capital structure as a model with regression analysis of dynamic panel data of 27 companies in India. The profitability had a negative impact on the capital structure; growth had a positive impact and non-debt tax shield was insignificant.

In a study involving 369 Vietnamese firms (20082020) using FEM and REM, Dang, et. al. (2021) obtained that leverage ratio and the Z-Score were significant negatively and positively related to Effective Tax Rate (ETR),

respectively, whereas firm size indicated significant positive relation.

Budiman, et. al. (2021) compared the observation of 47 Indonesian companies and concluded that tax avoidance had a positive effect on firm value, but the interaction with corporate governance negatively affected the company with insignificant results.

Ngatno. et. al. (2021) with a sample of 506 Indonesian MFIs (2019) reported long-term debt to total assets to be negatively but not significantly correlated with ROA and ROE; at the same time, the total debt to assets and short-term debt assets were reported to be positively correlated.

Researchers conducted GMM research on 125 Vietnamese companies, as Khuong, et. al. (2020) did. ETR showed adverse effects on ROA and ROE and positive effects on Tobin s Q. Leverage and growth were positive on ROA and ROE and negative on Tobin s Q. Firm size had both a positive and negative effect and Book Tax Difference (BTD) was negative on ROA and ROE and positive on Tobin s Q.

Nwala, et. al. (2020) investigated 25 insurance companies in Nigeria and revealed that debt-assets positively, and equity-assets negatively, associated with ROA, but the findings were not of much significance in the Tobin Q. A reverse took place in the signs of ROA models. In German firms, Abdullah, et. al. (2019), employ the GMM technique to state the positive and significant effect of total debt to assets on ROA and ROE.

The examination of the impact of debt-to-equity ratio on EPS and ROE in 80 Nigerian non-financial companies revealed that this relationship was always negative in a majority of different models considered by Kenn-Ndubuisi, et. al. (2019). In both pooled and marginal, Total debt to assets had adverse impacts on the EPS, and negative results in all of them on ROE. In all the models, the long-term debt to capital ratio was negatively connected to ROE.

Negative leverage profitability relationships also are supported in earlier studies. Similar to Iavorskyi (2013), in Ukraine, negative correlation was noted between debt and profitability; however, its value is lower than that recorded by Jaworska, et. al. (2015). Fosberg, et. al. (2006) reported no or small relationship in the case of AMEX firms but strongly negative relationship in the case of NYSE firms.

METHODOLOGY

This study adopts an ex-post facto design to examine the relationship between capital structure and the performance and stability of Nigerian insurance companies, using historical financial and operational data from annual reports. This non-manipulative approach ensures data integrity, enabling pattern identification and informed conclusions on the effects of capital structure components on long-term stability. The population of this study comprises all registered insurance companies operating in Nigeria, specifically focusing on the 17 insurance firms listed on the Nigerian Exchange Group (NGX) as of April 2025.

Model Specification

The model specification of this study is given as:

$ROCE_{it} = \beta_0 + \beta_1 DER_{it} + \beta_2 TD_{it} + \beta_3 TE_{it} + \mu_{it}$ ……1

Where:

y_1 = Return on Capital Employed (ROCE)

x_1 = Debt-to-Equity Ratio (DER)

x_2 = Total Debt Ratio (TD)

x_3 = Total Equity (TE)

β_0 = Constant

$\beta_1 - \beta_3$ = Co-efficient

μ = error term

Presentation and Discussion of Results

Presentation of Results

Table 1: Descriptive Statistics

	ROCE	DER	TD	TE
Mean	0.088147	0.515575	6.505939	7.378219
Median	0.062637	0.161951	6.692592	7.762819
Maximum	0.446733	15.72240	8.024359	8.518442
Minimum	0.000497	0.001206	4.130109	4.561936
Std. Dev.	0.083309	1.625957	0.903234	0.888515
Skewness	1.850083	8.361759	-0.405209	-0.895010
Kurtosis	7.453193	78.14558	2.237346	2.834445
Jarque-Bera	139.6756	24693.89	5.160074	13.46493
Probability	0.000000	0.000000	0.075771	0.001192
Sum	8.814660	51.55754	650.5939	737.8219
Sum Sq. Dev.	0.687094	261.7300	80.76725	78.15642
Observations	100	100	100	100

Source: E-view (2025)

The descriptive statistics reveal that the average Return on Capital Employed (ROCE) stood at 8.81 and a median of 6.26 percent depicting that the performance of the firms was also skewed. ROCE was skewed (1.85) and had relatively low dispersion (Std. Dev. = 0.0833), indicating that there were anomalously good results by some of the firms. The Debt-to-Equity Ratio (DER) was 0.516 with a lot of dispersion (Std. Dev. = 1.626) and much skewed (8.36) so that only a few firms were characterized by a high leverage as compared to others. The mean of Total Debt (TD) and Total Equity (TE) was 6.51 and 738 respectively (log transformed), where there was minimal variability with negative skew which indicated that most firms were concentrated at higher values with few extreme low values. The value of Kurtosis indicates that there are leptokurtic ROCE and DER, and the latter tends to include extreme outliers. Jarque-Bera tests imply ROCE, DER and TE distributions to be significantly non-Normal ($p < 0.05$), whereas TD is nearly Normal ($p = 0.0758$)

Regression Analysis

Table 4.2: Regression and Diagnostic Tests' Results for Hypothesis One

Variables	**Coefficient**	**Std. Err.**	t-Statistic	Prob.
C	0.201	0.051	3.885	0.000
DER	-0.009	0.004	-2.298	0.023
TD	0.117	0.011	9.935	0.000
TE	-0.118	0.012	-9.220	0.000
Model Statistics:				

R-squared (overall) = 0.547
F-Statistics = 38.667; p-value (F-Statistics) = 0.000; Durbin-Watson stat = 1.508
Diagnostic Tests:
Hausman Test: $chi^2(4) = 27.069$, $p = 0.000$
Heteroskedasticity Test (Breusch-Pagan / Cook-Weisberg): $chi^2(3) = 0.184$, $p = 0.189$

Dependent Variable: ROCE @5% significance level

Source: Researcher's Compilation (2025)

Interpretation

Table 4.2 presents the regression output that looks at the impact of the key aspects of capital structure that include Debt-to-Equity Ratio (DER), Total Debt (TD) and Total Equity (TE) on ROCE of insurance firms in Nigeria. Constant (C) is positive and significant (0.201, p = 0.000), which implies that, keeping other factors at a constant rate, an average ROCE of the firms was 20.1% in a given setting.

DER has a negative statistically significant g coefficient (-0.009, p = 0.023) and it means the higher leverage in comparison to the equity means lower ROCE. This implies that too much use of debt relative to equity may lower profitability because of higher financing expenses or the threat of financial risks. On the other hand, the coefficient of TD is positive and significant (0.117, p = 0.000), meaning that there is positive association between the total debt in absolute values with ROCE, perhaps because of the advantages of debt financing, including tax benefits in terms of an interest tax shield, or using leverage to make profitable investments. The significant negative impact of TE is (-0.118, p = 0.000), indicating that increases in levels of equity, in comparison with levels of total financing, has the likelihood of decreasing ROCE, which could be a result of dilution in returns when equity financing is high.

It has an R 2 = 0.547, the model explains 54.7 percent of the variation in ROCE and the value of R squared would be moderately strong. The F-statistic (38.667, p = 0.000) assures that independent variables are exhibited in a significant effect on ROCE. The Durbin-Watson (1.508) is near to the two implying that there are no critical correlated issues.

The tests used in the diagnosis give the model reliability. Following the Hausman test (h 2 (4) = 27.069, p = 0.000), it can be considered that the firm-specific effects have a significant impact on the results, and the fixed effects model is more suitable than the random effects model. According to Pesaran (z = 1.145, p = 0.2521), there is no indication of cross-sectional dependence implying that the residuals are not cross-sectionally dependent. No relevant heteroskedasticity according to the Breusch-Pagan/Cook-Weisberg heteroskedasticity test = 0.184, p = 0.189) and therefore the variances of the errors do not differ significantly over observations.

DISCUSSION OF FINDINGS

Debt-to-Equity and Return on Capital Employed (ROCE)

The result that the debt-to-equity ratio (DER) is found to have a significant impact on ROCE in Nigerian insurance companies is similar to Georgakopoulos, et. al. (2022) who stated that leverage may decrease ROCE when high levels of debt are used to finance the operations of a company because of the related interest expenses, as seen in the negative coefficient in this finding. Equally, Singh (2024) noted that in Indonesia, high DER adversely affected the microfinance institutions. On the other hand, Michalkova, et. al. (2021) opined that moderate debt may increase ROCE because of the tax shelter and superior capital allocation in a controlled market such as insurance.

Total Debt and Return on Capital Employed (ROCE)

The large impact of total debt (TD) on ROCE is corroborated by Yusrini, et. al. (2021) who identified well-managed debt to be associated with efficiency and returns in a capital-intensive industry. The same was

observed by Peace, et. al. (2025) when discussing the higher ROCE achieved by African financial institutions that make strategic use of debt. Yet, Aliyu (2019) cautioned about the possibility of debt becoming troublesome to the cash flow, risk, as well as the decrease of ROCE, especially in situations when the financial discipline is loose.

Total Equity and Return on Capital Employed (ROCE)

The sizeable influence of total equity on ROCE is evinced by Çam, et. al. (2022), who emphasize that the liquidity financing leads to better stability, longevity of investment capacities, and absence of interest loads. Equity bases that are strong contribute to flexibility and efficiency. On the other hand, Sikka, et. al. (2019) cautioned against too much equity since it may erode ownership and create inefficient capital allocations. Chukwu, et. al. (2025) added that returns can be minimized by underutilized equity among the Nigerian insurance firms. The effectiveness is therefore pegged on sound management of equity.

CONCLUSION AND RECOMMENDATIONS

It was concluded that the elements of the capital structure had a significant impact on the performance of the Nigerian insurance firms, and especially by their effect on the level of the return on capital employed (ROCE). The debt-to-equity ratio showed a significant mark so that a balance between debt and equity seemed essential in coming up with sustainable returns. Whereas high levels of debt were detrimental in terms of making or losing profitability due to high interest rates and exposure to financial risks, moderate and strategic application of debt financing assisted in facilitating growth and capital investment. ROCE also reflected a considerable connection with total debt and careful management of debt should be observed. Moreover, the total equity had a positive effect on ROCE since the firms that had a robust bases of equity experienced stability, decreased dependency on loans, and flexibility in coming out of uncertainties in economic environment. The conclusions emphasized the importance of the balanced mix in capital structure that maximized debt and equity to maximize profitability and long-term stability along with government regulations that promoted the good capital structure in insurance sector.

Recommendations

On the basis of results, the suggestions of the strategies were made to improve financial performance and financial stability in the insurance industry as the debt-to-equity ratio, total debt and total equity had a major correlation with the return on capital employed (ROCE).

First, the insurance companies were advised to have a well-balanced capital formation where the debt was utilized in moderate liquidity to help to avoid overburdening interest charges and financial stress. Intermediate amount of debt may generate better returns without abating solvency.

Second, because the total debt had a huge influence on ROCE, it was recommended that companies needed to reinforce debt management through appropriate borrowing to fund profitable projects, negotiating good loan terms, and timely repayments according to the cash flow. An effective usage of debt would enhance the level of profitability and stability.

Third, because total equity is a major source of ROCE, firms were advised to fund their capital structure more by using the retained earnings or issuing new shares, which will increase the level of capital bases, help in increasing investor confidence, and avoid excessive use of debts.

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