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An Analysis of Asset Utilisation and Profitability of Quoted Non-life Insurance companies in Nigeria

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Abstract: Asset utilisation is a multi-task exercise conceived because it measures how efficient an insurance company uses its resources for improved profitability. However, the inverse cycle nature of insurance has made asset utilisation precarious in operation of insurance business. Therefore, the study investigated the effects of asset utilisation on the profitability of quoted non-life insurance companies in Nigeria. This study adopted ex-post facto research design. The population of the study comprised of all twenty-six (26) quoted non-life insurance companies operating in Nigeria as at 31st of December, 2020 spanning a ten (10) year period through census sampling technique. Data were extracted from the companies' financial statement. The study employed a multiple linear regression to determine the joint effect of asset utilisation proxies (financial essets, reinsurance utilisation and firm size) on profitability measured with Return on Asset (ROA). The study revealed a significant joint relationship of asset asset indicators on profitability. The study therefore recommended that quoted non-life insurance companies in Nigeria should optimize their assets in order to increase profit.

Keywords: asset; asset utilisation; financial asset; reinsurance utilisation

JEL Classification: G52

1. Introduction

The insurance industry is one of the central pillars of global financial system because of its inimitable contribution to economic growth and development. In 2019, the global insurance industry wrote life premiums worth approximately 2.92 trillion U.S. Dollars, and non-life premiums of about 3.38 trillion U.S. dollars. (Statista, 2020). Over the past decade, contribution of insurance premiums to global GDP (insurance penetration) and average per capita spending on insurance (density) have remained relatively stable. Nevertheless, the Nigerian insurance industry has not recorded a momentous impact

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in terms of its contribution to the country's GDP (which is below 0.4%) despite its growing young population and potentials (Chinedu, Titus, & Thaddeus, 2010). One of the major reasons for this lackluster performance may not be unconnected to the failure of insurance companies to optimally leverage on assets within their control to generate sufficient premium revenues that will bolster profitability (Coronation Marchant Bank, 2019). Industry research conducted by the Nigerian Insurers Association (NIA) through its annual publication, NIA Digest revealed that the industry's total asset stood at N1.4trillion with a Profit after Tax of N42.6billion as at 2019. This result is however inversely related to the industry's Return on Asset (ROA) of approximately 3% (i.e., N42.6billion/N1.4trillion). This is abysmally low when compared to other sectors of the economy.

With increasing shareholders' expectations and the desire to succeed in highly competitive business environment, insurance managers have a greater responsibility to use firm resources effectively and efficiently in achieving shareholders wealth creation and other objectives (Mathuva, 2009). Therefore, ability to utilise assets to achieve a desired profitability is a distinguishing factor between effective and ineffective managers (Offor & Farajimakin, 2020). Asset utilisation ratios are yardsticks for measuring management's effectiveness. Insurance companies in Nigeria, have over the years, grappled with low revenue generation and profitability relative to their counterparts in other financial services sector, notably the banking industry. The major problem is attributable to their inability to leverage assets (which are resources owned and controlled by them) to generate adequate premiums that engender improved profitability. The industry continues to suffer a setback in terms of Foreign Direct Investments (FDIs) because of potential investors skepticism about returns on investment (ROI). The low level of profitability occasioned by low premium generation has not, to a great extent, increased value to shareholders in form of sustainable dividend declaration or improved retained earnings, and capital appreciation. While financial assets are at the central of insurance companies' financial statements as they produce investment income. Industry research conducted by NIA from 2010 to 2019 shows that investment income averaged 7% of the total investment assets. This implies a very low investment returns on financial assets given the various investment opportunities and frontiers available to insurance companies. Furthermore, insurance companies rely on reinsurance companies for claims recoveries in order to reduce loss exposure. Though, Abass and Obalola (2018) emphasized on the importance of reinsurance, its excessive reliance has not witnessed improved performance in underwriting operations to the expectation of shareholders. This position is also shared by Hafiza, Mobeen and Syed (2014). Consequentially, a prolonged risk of insolvency puts an insurer in a liquidity trap. On the other hand, Cheng and Wong (2004) assert the important of liquidity as one of the important determinants of financial health of insurance companies. Hence, a company that is not able to honour its short-term financial obligations, moves a step ahead towards its bankruptcy (Kiio, 2013). Insurance industry asset size as at 2019 in Nigeria totaled N1.4triilion with a gross premium written of N491billion (NIA Digest, 2019). While this looks like a good performance, insurance companies are yet to optimally leverage these assets. This is because the premium has nearly subdued by associated costs (such as reinsurance outwards, claims costs and acquisition costs) to produce a marginal ROA of 3% in 2019 to shareholders (Agusto & Co., 2021). Therefore, this study is aimed at providing empirical analysis of the relationship between assets utilisation variables (financial assets, reinsurance utilisation and firm size) and profitability of quoted non-life insurance companies in Nigeria.

2. Literature Review

2.1. Conceptual Review

The term "assets" is used to refer to a company's monetary-dominatable economic resources (Vijayakumar, 2020). It is any resource that is expected to provide future economic benefits and monetary value (Demirhan & Anwar, 2014). Financial assets, often called financial instruments, are intangible assets, which are expected to provide future benefits in the form of a claim to future cash. Some financial instruments are called securities and generally include stocks and bonds, treasury bills, government bonds, corporate bonds, foreign bonds, stocks, commercial papers, investment notes, fixed income investments, loans and other receivables (Aleksandrina, 2020; Głuchowski, 2001). Financial instruments include all financial assets and liabilities. Although, insurance companies have two sources of income; underwriting profit (premiums less claims and expenses) and investment income. While the former offsets underwriting operations, the latter is earned through the management of financials (Głuchowski, 2001).

International Association of Insurance Supervisors (IAIS) (2006) defines reinsurance contract as "an arrangement between a party known as (re-insurer) and another party (insurer or cedant) to indemnify against losses on one or more contracts issued by the cedant in exchange for consideration (premium)". Though, Abass and Obalola (2018) highlighted the vagueness of reinsurance as secondary market for insurance risks because it is hardly known outside insurance sector. The concept of reinsurance utilisation is a choice to purchase reinsurance not only for the apparent present condition of risk assumed by an insurance company but also its future conditions (Dionne, 2000; Desjardins & Dionne, 2017). Essentially, reinsurance utilisation is aimed at providing capacity to enable an insurer assume larger risks while at the same time, ensuring stability of underwriting and financial results (Patrick, 2018). Reinsurance assets comprise primarily reinsurers' share in technical-insurance provisions and reinsurance recoverables (Joaquin, 2015). Abass and Olubusade (2023), Dansu and Obalola, (2018) and Abass and Obalola (2018) had reiterated the importance of reinsurance utlisation of the financial performance of insurance companies in Nigeria.

The size of an organisation is the amount and scale of production capacity or the amount and variety of services a company can provide concurrently to its customers (Jonsson, 2007). The rationale for increase in firm size is targeted at gaining economies of scale. Reinhard's (1983) oligopoly model proposes that size is positively related to a firm's ability to produce technologically complicated products which in turn leads to concentration. Firm size represents a contingent factor that falls into the category of organisation characteristics. According to Woodward (1965), the best indication of ''bigness'' is the size of the management group. Firm size is commonly measured by gross sales or gross value of assets number of employees and sales turnover. The important of size as determinant to insurance profitability had been emphasized by Malik (2011), Daniel and Tilahun (2013).

2.2. Theoretical Review

This study is hinged on portfolio theory. The Portfolio Theory was initially developed by Markowitz and later became one of the three portfolio theories introduced in 1952 (Shefrin & Statman, 2002). The theory took its foundation from the Capital Asset Pricing Model (CAPM). Essentially, the allocation of resources in custody of managers require making delicate and deliberate decisions that will stimulate adequate returns. The theory incorporates investors' risk preference and attitude, expectation of returns and risk of all assets considered without overriding diversification effects that reduces overall portfolio risk (Jorion, 1992; Eisenhauer, 2005).

2.3. Empirical Review

Appraising asset utilisation is a multi-task exercise conceived and performed because it measures how efficiently an organisation uses its resources. Fozia, Niaz and Ghulam (2020) investigated the impact of capital structure on firm financial performance in textile sector of Pakistan. One Hundred and Forty One (141) textile firms were used as sample. The results showed that all the determinants of capital structure are significant and the findings suggested that Pakistan textile sector is performing below the optimum capital structure level and textile firms of large size remained fail to achieve the economies of scale. Relatedly, Mawih (2013) examined the effects of assets structure (fixed assets and current assets) on the financial performance of some manufacturing companies listed on Muscat Securities Market. The study attempted to answer the effect of fixed assets turnover and current assets turnover on financial performance. In a sample of manufacturing companies in the Sultanate of Oman. The study found out that assets doesn't have a strong impact on profitability in terms of ROE.

A study conducted by Dansu and Obalola (2018) using data obtained from the audited annual financial reports of selected Nigerian insurance firms to extract Ratio of Ceded Reinsurance (RCR), Ratio of Reinsurance Recoverable to Policyholders' Surplus (RRPHS), Loss Ratio (LR), and premium growth rate (PGR). The study found that a significant positive relationship exists between reinsurance dependence and Loss Ratio. Abass & Obalola (2018) conducted similar study on forty-one (41) registered general insurance companies in Nigeria using Reinsurance Ceded Ratio (RCR) and Reinsurance Dependence Ceded Premium (RDCP) as indicators to measure the extent to which reinsurance utilisation contribute to profitability. Their findings revealed that reinsurance dependence (measured with RCR and RDCP) has a high degree of influence on the profitability level of non-life insurance companies in Nigeria. This outcome is similar to the findings of Cole and McCullough (2006), and Iqbal and Rehman (2014b). Moreover, there is empirical relationship between a firm's size, structure, and profitability of insurance companies. For example, Malik (2011) examined the determinants of Pakistan's insurance companies' profitability proxied by return on total assets. The result showed a positive relationship between profitability and size. Related studies carried out by Haron and Azmi (2004) and Jonsson (2007) shared convergent view.

3. Methodology

This study adopted ex-post facto research design. The population of the study comprised of all twenty-six (26) quoted non-life insurance companies operating in Nigeria as at 31 December 2020. This was influenced by the availability of the audited financial reports as published on companies' websites and NIA Digests. Census sampling technique was adopted. The study adopted secondary data obtained from annual reports of insurance companies spanning ten (10) years. The data used in this research were extracted from the company's financial statement. The atudy a multiple linear regression to determine the relationship between asset utilisation (independent variable) and profitability (dependent variable).

3.1. Model Specification

Reinsurance utilisation, firm size, liquidity, and financial assets were regressed with the values of ROA. Based on reviewed literatures and theoretical deductions derived above, bank performance is assumed as a function of leverages and this can be expressed mathematically as:

Performance= f (Assets Utilisation) …… *equation* (1)

$Y_t = \alpha + \beta_1 F_t + \mathcal{E}_t$ ……..*equation* (2)

The above model was translated into a regression equation as follows;

Econometrically written as

The following model was estimated:

$$ROA_{it} = \propto_0 + \propto_1 RU_{it} + \propto_2 FS_{it} + \propto_3 LIQ_{it} + \propto_4 FA_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots .equation\ (3)$$

3.2. Measurement

FA = financial asset as measured by Investment income/Total financial asset

FS = Firm Size as measured by Natural Logarithm of Total Assets

RU = Reinsurance utilization as measured by Reinsurance ceded/Total assets

LIQ = Liquidity as measured by cash & cash equivalent/total assets

ROA = Net Profit /Total Assets

4. Presentation of Data

Table 1. Descriptive analysis of the impact of asset utilization on profitability in quoted non-life insurance companies in Nigeria

	ROA	FA	RU	LIQ	FS
Mean	0.070825	0.966711	0.282179	0.195406	16.30275
Median	0.026530	0.098351	0.258997	0.115680	16.00000
Maximum	6.149645	112.6463	3.806375	4.173020	20.00000
Minimum	-0.856678	-0.752916	-6.340381	-0.045340	0.000000
Std. Dev.	0.346400	6.389100	0.602241	0.312196	1.275174
Skewness	9.983855	12.83394	-5.182006	6.727498	-5.280324
Kurtosis	145.8322	191.7374	60.62710	65.94111	71.67314
Jarque-Bera	661258.2	1153422.	108991.2	131700.8	153475.2
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Observations	763	763	763	763	763

Source: Authors' Computation (2023)

Table 1 shows all of the ROA and asset utilisation variables were found to have a normal distribution when they were examined with the Jarque-Bera (JB) statistic. The table indicates that every variable has a positive value at the symmetry level, with the exception of the usage of reinsurance and the size. As observed, every single one of the variable sets possesses kurtosis values that are greater than one and they are all positive.

Table 2 Panel Regression result based on effect of assets utilisation on profitability of quoted non-life insurance companies in Nigeria

Dependent Variable: ROA

Method: Panel Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FA	0.013616	0.001907	7.138208	0.0000
RU	-0.005241	0.019977	-0.262329	0.7931
LIQ	0.080616	0.039907	2.020084	0.0437
FS	-0.024095	0.009659	-2.494534	0.0128
C	0.436197	0.159736	2.730729	0.0065

R-squared	0.087564	Mean dependent var	0.070825
Adjusted R-squared	0.082749	S.D. dependent var	0.346400
S.E. of regression	0.331758	Akaike info criterion	0.637711
Sum squared resid	83.42817	Schwarz criterion	0.668100
Log likelihood	-238.2868	Hannan-Quinn criter.	0.649411
F-statistic	18.18580	Durbin-Watson stat	1.158674
Prob(F-statistic)	0.000000		

Source: Authors' Computation (2023)

Table 2 depicts that asset utilisation variables (Financial Assets, Reinsurance Utilisation, Liquidity and Firm Size) jointly had significant relationship on the return on assets of quoted non-life insurance companies in Nigeria. As a consequence, the quoted insurance companies' levels of profitability are sensitive to the minutest shifts in the utilisation of their assets. This finding shares a convergent view with Vijayakumar (2011), Riski (2020) and Fozia et al. (2020).

A look at the individual's variables reveals that financial asset had a weak positive coefficient and significantly affect the return on assets of quoted non-insurance companies in Nigeria. While reinsurance utilisation showed a negative coefficient. Liquidity on the other hand had a positive coefficient and significantly affect the return on assets of the selected quoted insurance companies in Nigeria.

5. Conclusion and Recommendations

The inverse nature of insurance operation permits that insurance companies need to form an expectation of future risks before they can be accepted. The performance of this role among other functions is highly dependent of asset utilisation and maximisation by insurance companies especially non-life insurance companies due to the fact that non-life business is a

short-term policy. Hence, management of asset is more pronounced. Conclusively, assets utilisation has significantly relationship on the profitability of quoted non-life insurance companies in Nigeria.

This study therefore recommends that management of insurance companies, especially non-life should maximize asset utilisation in order to create shareholder value and on the long run improve their bottom line.

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