### ASSESSING THE PROFITABILITY OF INSURANCE SECTOR SERVICES IN NIGERIA FROM 2010-2019: A PANEL APPROACH

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### Abstract

The fundamental goal of the insurance industry is to spread risks. The risk-absorption role of insurers contributes to financial stability in the financial sector and gives economic institutions a sense of security and safety, which in turn boosts economic growth and development. The essence of the study therefore is to assess the pattern of profitability of insurance companies in Nigeria. An ex-post facto research design was adopted in carrying out this study. Aggregate financials of forty-one (41) non-life companies for the period 2010 – 2019 was gathered from the insurance digest of the Nigeria Insurers Association database. Information gathering was analysed using the Augmented Dicker Fuller unit root test and the Ordinary Least Square Regression techniques. The data generated from the financial statements of these companies are Return on Assets (ROA), Net Claims (NC), and Expense Ratio (ER). Where: Return on Asset (ROA) = Net Income before taxes/Total Assets, Net Claims (NC) = Total claims paid in the year, Expense Ratio (ER) = Total Underwriting expenses/Earned Premium. The findingsof this study indicate that ROA, or return on assets, has an indirect relationship with NC (net claims) and also indirect relationship with ER (expense ratio). According to the study, claims managers in the Nigerian insurance industry should manage their claims processes effectively in order to minimize claims against each earned premium. Future research can examine the effect of the explanatory variables on alternative profitability measures.

Keywords: Profitability, Panel Approach, Financial Ratios, Regression Analysis

### 1. INTRODUCTION

Insurance gives financial cover against potential and identified risks that occur or are observed within a given time frame. Insurance is also a one-of-a-kind product in that it protects you from the unexpected misfortune with unknown cost implication until the coverage period has ended, whereas policyholders make premium payments at the beginning or during the coverage period (Agbaje, 2020). The fundamental goal of the insurance industry is to spread risks. The contribution of insurance industry in stabilizing financial sector and gives economic institutions a sense of security and safety cannot be overemphasized (Ahmed, 2018). He also posited that the insurer roles as a risk absorber is a catalyst to economic growth and development. Insurance is a vital part of any economy's financial system, and it is accountable for handling risks that individual and institutional are exposed to. The Insurance industry also serves as a backbone in any country risk management process; they ensure fiscal security, act as a vigorous link in the financial intermediation chain, and provide a source of long-term funding for infrastructure developments (Augustine & Nwanneka, 2019). Similarly, insurance companies contributions not only in risk management, but also in job creation and tax revenue generation for the government, as well as providing an avenue for investing in financial instruments such as bonds and stocks (Hasibuan, Sadalia & Muda, 2020). As a result, it is critical that insurance companies in Nigeria perform admirably and profitably.

Many scholars in the area of business and strategic management always lay a lot of emphasized on financial performance of organisations (Almajali, Alamro & Al-soub, 2017). Business practitioners in various organizations have also been concerned about the implications of financial performance on an organization's health and survival. High profitability and contribution to the economy are reflected in management efficiency and effectiveness in utilizing a company's resources (Naser & Mokhtar, 2019). Profitability has attracted scholars' attention in the field of corporate finance for decades, but it has received little attention in the insurance industry (Ahmed et al., 2018).

Profitability is critical for businesses in the insurance industry because it ensures their survival. Profits reported in the financial statements of Nigerian insurance companies have fluctuated over the years. It is understandable that the insurance company's profit is derived from the excess of premium over claims; therefore, it is critical to monitor the claims pattern in order to ensure that an efficient premium is paid (Ayele, 2017).

The premium income generation of an insurer is primarily to address claims situations that may arise through financial or economic losses. Therefore, cognate synergy between the insurer and the insuring populace is usually cordially mutual by effective claims settlement. (Ajemunigbohun, 2018; Bulbul & Baykal, 2016; Murgatroyd, Lockwood, Garth, & Cameron, 2015). Premium income generation is key to an insurer in order to be able to address claim payments on any determined insurance policy. The amount paid out of the premium income generated and how much profit insurance make in the long run has been a major concern. In Nigeria, only few empirical studies have investigated about insurance companies' profitability (Abubakar, 2018). The majority of profitability research is done in other industries. Among other things, the only few studies that have been done on the insurance industry profitability are in the area of age, size, capital structure, and loss ratio of the business and inflation. Factors such as insurance premiums and claims have empirically been studied for insurance company profitability in Nigeria. This, therefore, informs the need for longitudinal survey analysis of the profitability of insurance companies in Nigeria from 2010 to 2019.

### 2. LITERATURE REVIEW

Profitability is a critical objective for any business, including insurance companies inclusive with main aim of improving an organization's financial health (Olajumoke, 2019). Profitability describes the relationship between the out-and-out sums of incomes and other variables. Ibrahim and Abubakar (2017) posited that profitability is a key performance indicator (KPI) of insurance companies because it is a reliable measures of the company's income state. Profits, in practice, are defined by upper-level managers as earnings after expenses while some others measured in terms of return on assets (ROA) or profit after tax (PAT) (Green & Segal, 2016; Hafiz, 2018). Insurance companies' profitability is influenced by a variety of factors, which are generally classified as internal, industry, and macroeconomic. Internal are factors that can be control by management and can also make or mar their profitability level irrespective of the external environment (Ayele, 2017; Hafiz, 2018). Swiss Re (2008) asserts that an insurer's profitability is determined by its underwriting and investment activities. The underwriting activities are examined in this study.

Irukwu (2019) defines an insurance claim as an *"insurance extract in which the insurer agrees to indemnify the insured against a loss that may or may not occur in the future or to pay a specified sum of money if a specified event occurs"*. He describes insured risk as the loss against which the policy is written and that insurance is enforceable in court because it is legally valid. He continued by stating that the obligations of both parties to the contract of insurance. While the insured's primary obligations are to pay the agreed premium and adhere to the policy's terms, the insurer's primary obligations are to adhere to his own terms and promises under the policy and also settle genuine claims promptly and fairly. Just like any other of the Nigerian economy, the insurance industry is plagued by a slew of issues. There is no doubt that some, if not all, of these issues are solvable by insurance practitioners with the assistance of government and the understanding of the insuring public. The last thing on the average Nigerian's mind is the need to effect insurance policies, despite the fact that business and life inherently involve financial or any other risks, many of which can be mitigated through insurance (Akintayo, 2004). According to Irukwu (2019), a good insurance manager must strive to maintain an competent claims department with technically competent and dependable personnel.

Additionally, it has been argued that various organizations have embraced the management concept denoted by the acronym TQM (total quality management) since the early 1980's, which has aided managers in resolving claims and maintaining a positive insurance culture. Mayers and Smith (2018) argued, however, that "it is the insurer's responsibility to indemnify a policyholder during the policy's term." Additionally, he stated that when claims are contested on flimsy grounds, the insurance industry is brought into disrepute. As a result, insurance companies must ensure that claims are paid promptly and on time. Generally speaking, the claim management process entails four critical components: resolving claims, detecting fraud, reducing costs, and avoiding litigation (Lalithchanadra and Kumari, 2017). According to Butler and Francis (2018), claims payment is the insurers' largest single cost, accounting for 80 percent of all premiums. Thus, Redja (2018) defined claim management as "all managerial decisions and processes relating to the settlement and payment of claims in accordance with the terms of the insurance contract." According to Greene and Segal (2016), as cited in Kasturi (2016), an insurance company's financial performance is typically expressed in terms of net premium earned, profitability from underwriting activities, annual revenue, return on investment, and return on equity.

## 3. **RESEARCH METHODOLOGY**

To attain the study objective, an ex-post facto research design was adopted. The reason for the adoption of this research design was because it provided the researchers with the opportunity to investigate two or more groups, subjects, events or objects (Oyeniyi, Abiodun, Obamiro, Moses, & Osibanjo, 2016; Rowthwer, 2013). This study attempted to quantify the pattern of profitability in the insurance industry for the period 2010 - 2019, extracted from the insurance digest of the Nigeria Insurers Association database. Information gathering was quantifiably analysed using the Augmented Dicker Fuller unit root test and the Ordinary Least Square Regression techniques. The data extraction consisted of forty-one (41) non-life companies. The data generated from the financial statements of these companies are Return on Assets (ROA), Net Claims (NC), and Expense Ratio (ER).

Where: Return on Asset (ROA) =  $\frac{Net \, Income \, before \, taxes}{Total \, Assets}$ , Net Claims (NC) = Total claims paid in the year, Expense Ratio (ER) =  $\frac{Total \, Underwriting \, expenses}{Earned \, Premium}$ .

Thus, the model is represented in a functional form below: ROA = F(ER, NC) ......(1) In a linear function, it is represented as follows:  $ROA = \beta_0 + \beta_1 ER + \beta_2 NP + \mu_t \dots \dots \dots \dots$ (2) Where  $\beta_0$  =constant term,  $\beta_1$  and  $\beta_2$  = regression co-efficient of *ER* and *NC* and  $\mu_t$  = error term.

### 4. **RESULTS AND DISCUSSIONS**



The figure 4.1. above shows the analysis of gross premium income for a period 10 years from 2010 to 2019. The gross premium income includes contributions from motorist insured in Nigeria. From the chart above, it showed an upward movement from 2010 to 2011 before a sharp downward movement in 2013 and a sharp upward movement in 2014. The zigzag

movement of gross premium income could be due to factors that affect premium payments which are age, medical records, geographical location, policy duration or occupation. Figure 4.2. shows the trend analysis of gross claims payment from 2010 to 2019. The movement showed an upward and a sharp downward movement in 2013 even though there are fluctuations in the upward movement. The upward movement from 2018 to 2019 could be due to claims settlement factors such as asymmetric information, agency problem and insurer's risk of opportunism.

In addition, figure 4.3. shows a slight downward linear movement of the claims ratio which shows the relationship between gross premium income and gross claims paid from 2010 to 2019. The figure 4.3 shows an identical movement from 2010 to 2012. From the year 2012, the was a sharp movement upward to 2013. In the year 2013, a downward movement cropped in which changed the narratives in 2014. From 2014 still 2018, the relationships between gross premium income and gross claims paid showed an upward movement before it declined in 2019.

Lastly, figure 4.4 also shows a slight downward linear movement of the profit in 2013 due to higher claim expense. The figure 4.4 shows an identical movement from 2011 to 2012. From the year 2012, there was a sharp movement downward to 2013. In the year 2016 and 2017 a regular movement was also observed, a sharp movement upward in 2019 was also observed

### **Ordinary Least Square**

Dependent Variable: ROA Method: Least Squares Date: 03/30/22 Time: 13:10 Sample: 2010 2019 Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	4.658368	0.271447	17.16124	0.0000
ER	-7.608825	0.424081	-17.94193	0.0000
NC	-1.80E-09	3.6/E-09	-0.49014/	0.6390
R-squared	0.987170	Mean depe	ndent var	1.759213
Adjusted R-squared	0.983504	S.D. depen	dent var	0.500074
S.E. of regression	0.064228	Akaike info	o criterion	-2.409441
Sum squared resid	0.028876	Schwarz cr	iterion	-2.318665
Log likelihood	15.04720	Hannan-Qı	inn criter.	-2.509021
F-statistic	269.2947	Durbin-Wa	tson stat	1.994135
Prob(F-statistic)	0.000000			

Source: Eview's Output

The long run linear regression equation is given by ROA = 4.658368 - 7.608825ER - 1.80E - 09NP which shows that a unit increase in expense ratio will bring about 7.6088 times decrease in return on asset and also a unit increase in net claims will bring about 1.8009 times decrease in return on asset. The computed linear co-efficient of determination ( $R^2 = 0.987170$ ) shows that (98.717%) of the total variation in return on asset is accounted for by the independent variables which are expense ratio and net claims. The remaining (1.29%) of the total variation is accountable to the influence of other factors which are not included in the regression

function. The value of the Durbin Watson (DW) is (1.994135) at 5% level of significance shows that there is evidence of autocorrelation in the model.

# 5. CONCLUSION AND RECOMMENDATION

Profitability is impacted by a variety of factors in the insurance industry, including escalating payment of claims. Profitability is what determines the capacity of an insurance company to pay claims on time. The essence of the study is to assess the pattern of profitability of insurance companies in Nigeria. The findings of this study indicate that ROA, or return on assets, has an indirect relationship with NC (net claims) and also indirect relationship with ER (expense ratio). According to the study, claims managers in the Nigerian insurance industry should manage their claims processes effectively in order to minimize claims against each earned premium. Additionally, careful consideration must be given to other administrative costs, such as underwriting, which have the potential to reduce the Revenues and profits of a company. Future research can examine the effect of the explanatory variables on alternative profitability measures.

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