



## EFFECTS OF GOVERNMENT REGULATIONS ON INSURANCE OPERATIONS IN NIGERIA (1999-2022)

OPEYEMI EMMANUEL OLADUNNI<sup>1</sup> AND EZEMA CLIFFORD ANENE<sup>2</sup>

<sup>1</sup>Doctorate Student, Department of Insurance and Risk Management, Enugu State University of Science and Technology, ESUT, Enugu Nigeria. E-mail: [profopeemma@yahoo.com](mailto:profopeemma@yahoo.com)

<sup>2</sup>Department of Insurance and Risk Management, Enugu State University of Science and Technology, ESUT, Enugu Nigeria. E-mail: [clifford.ezema@esut.edu.ng](mailto:clifford.ezema@esut.edu.ng)

Received: 20 October 2024; Revised: 21 November 2024;

Accepted 06 December 2024; Publication: 30 December 2024

**Abstract:** This study is an investigation into the effects of government regulations on insurance operations in Nigeria from 1999 to 2022. The specific objectives of the study were to establish the effects of interest rate on underwriting and claims management operations of insurance companies in Nigeria. The research design employed was an ex-post facto. Data were sourced from the Central Bank of Nigeria (CBN) statistical bulletin, and National Insurance Commission (NAICOM) Insurance Market Performance publication. Stationarity test carried out on the data revealed that data was stationary 5% levels of significance using. Using ordinary least squares regression, the regression analysis results revealed that there is negative but statistical insignificant relationship between government regulations as measured by interest rate and insurance operations using insurance underwriting and insurance claims management in Nigeria. The coefficient of determination ( $R^2$ ) which is 0.584031 indicates that interest rate contributes 58.40% of changes in premium income and claims payment variation. It is therefore recommended, among others that government regulations should be tailored towards encouraging innovative insurance products that meet the needs of the insuring public, use of relationship marketing strategies and establishment of adequately capitalized insurance firms. This will improve insurance contribution significantly to economic growth in Nigeria. Also, laws should be formulated with punitive measures on erring insurance players who violate ethical standard of operation as well as formulation of monetary policies that give room for project financing with considerable interest rate that attaches compulsory insurance on same to avoid risk of repayment default.

### To cite this paper:

Opeyemi Emmanuel Oladunni & Ezema Clifford Anene (2024). Effects of Government Regulations on Insurance Operations in Nigeria (1999-2022). *Journal of Quantitative Finance and Economics*, 6(2), 259-276. <https://DOI:10.47509/JQFE.2024.v06i02.05>

**Keywords:** Government Regulation, Interest Rate, Insurance Operation, Underwriting, Claims Management.

## 1. INTRODUCTION

The state can act as a resource for institutions providing finance, consultancy, and other services. Government regulations are necessary for businesses to protect employees, consumers, and the public and ensure compliance with market rules. Regulations such as tax codes, employment and labor laws, antitrust regulations, and advertising regulations are essential for businesses to operate ethically and responsibly. Although excessive regulations and changes in regulations may create some bottlenecks for businesses, the government's intervention and supervision ensure consumer safety, worker safety, and vital tax revenue. Companies must stay updated on regulations to avoid penalties and operate successfully within the legal framework. Overall, government regulations play a crucial role in shaping insurance business environment and promoting ethical and responsible practices. Sanction Scanner (2024).

In principle, monetary policy can transmit into the real economy through credit channel or the interest rate channel (Mishkin, 1996). The credit channel can affect the entire economy either through bank lending or via balance sheet channels. Both channels highlight information asymmetry in the financial markets, leading to adverse selection and moral hazard problems. The focus of this paper is on the interest rate channel. The interest rate channel theory signifies the proposition that due to 'sticky prices,' changes in the central bank's overnight interest rate will cause changes in the real short-term rate. Practically, an increase in the short-term nominal interest rate will cause the real short-term interest rate to rise. Accordingly, business investment expenditures and household spending on durable assets will increase (Jibrilla and Balami, 2022).

Insurance as a business involves risk transfer mechanism that provides indemnity/compensation against fortuitous losses through underwriting and claims operations. Underwriting involves risk measurement and evaluation leading to determination of the commensurate cost (premium) to cover that risk. While an insurance claim consist of a benefit paid to the insured person for a loss that may be covered under the insurance contract, the claims management phase gives an opportune moment for delivery by the insurers and to favourably impress the policyholder and enhance their reputation for better performance (Caren and Mirie, 2017). These insurance operations are moderated by various government regulations within financial market space.

The fourth quarter of 2023 witnessed a notable milestone in the Nigerian insurance sector, with gross premium written reaching an impressive N1,003.2 billion. This exceptional performance is credited to the consistent implementation of regulatory measures aimed at fostering market deepening. This was largely influenced by the Oil & Gas business in the non-life segment of the market. the non-life as a whole grew by 35.1% accounting for about N615.1 billion in gross premium written while the Life business increased by 16.1% during the year (NAICOM, 2024).

Given the above, this paper sought to answer the following research question: to what extent do the government regulations on interest rate affect insurance underwriting and claims management operations in Nigeria?

Detecting asymmetric behaviour in insurance underwriting and claims operations react to government regulations on interest rate is vital for several reasons. First, it can provide insights into how the central bank's policy rate changes pass through to premium generation and claims payment over important periods of government regulated and deregulated (market-determined) interest rate regimes from 1999 to 2022 in Nigeria. Second, notwithstanding the significance of investigating the possible asymmetries in the transmission process of monetary policy in an economy, there is a paucity of research investigating this issue as relating to insurance operations in Nigeria. The few exceptions are found in banking sector which include Sanusi (2010), Fomum (2011), Bangura (2011), Mangwengwende (2011), Ogundipe and Alege (2013), Kelilume (2014), and Mordi et al., (2019).

## **2. REVIEW OF RELATED LITERATURE**

### **Conceptual Review**

#### ***Government Regulations***

Government regulations are financial regulations, taxes, and environmental protection regulations. Financial regulations explain the policies that influence the operation of the financial industry applied to banks, credit unions, insurance companies, etc. The purpose of regulations is to ensure a safe space for the environment and individuals as well (Jibrilla and Balami, 2022). When there are regulatory measures to influence operations in an industry, discrimination and inequality are eliminated hence promoting safety and security. Regulations are also essential in enhancing quality control (Ivan and Jennifer, 2023).

An important channel of government regulation is monetary policy. Monetary policy is the control of the quantity of money available in an economy and the channels by which new money is supplied. Economic statistics such as gross domestic product (GDP), the rate of inflation, and industry and sector-specific growth rates influence monetary policy strategy. Central bank may revise the interest rates it charges to loan money to the nation's banks. As rates rise or fall, financial institutions adjust rates for their customers such as businesses or home buyers. Additionally, it may buy or sell government bonds, target foreign exchange rates, and revise the amount of cash that the banks are required to maintain as reserves. (Investopedia, 2024). This study adopts interest rate as government regulation.

### ***Interest rate***

For the economist, interest is above all a price, paid for the use of credit or money. It follows that the theory of interest-rate determination is a sub-set of price-determination theory. For the classical economists, the rate of interest was therefore determined by the interaction between the demand for investment capital (the fisherman making a net) and the supply of savings (the friend's surplus fish).

Interest rates and insurance are deeply linked, meaning any changes in interest rates affect the profitability of the insurance sector in multiple ways. Because many insurance companies tend to hold assets such as long-term bonds, when interest rates increase, the opportunity cost of holding bonds at a lower-rate over time also increases. Historical analysis shows that the overall trend is for the insurance sector to increase profitability when there are rising interest rates (Maverick, 2022).

### ***Insurance Operations***

Insurance companies perform both technical, financial, marketing and other commercial operations in managing insurable risks. The underwriting strategy and claims management programs of an insurer are related in that if more of the insurance products, which are sold lead to moral hazard, adverse selection and high outstanding premium; this will lead to high claims and a negative relationship with both the underwriting profit and the total net profit. This work examines technical operations of insurance companies through underwriting and claims management.

### ***Underwriting Operation***

Underwriting is the process of assessing insurable risks and determine the cost of providing cover to the insured with necessity on developing various terms and conditions upon which such contract would become binding (Oladunni and Okonkwo, 2022). Underwriting is done by grouping together similar risks for rating and the resultant rates are adjusted to take into account the group experience. This is then adjusted to cater for inflation, uncertainty and expenses. Stochastic models and sophisticated regression analysis and data mining tools are used by actuaries to take into account severity and frequency of claims in order to sufficiently price the risk (Promislow, 2011).

Insurance underwriting operation is measured in this study using insurance gross premium. The Insurance industry of Nigeria has sustained an apparent mark of a positive trend with regards premium generation which is indeed, a most essential variable in the measurement of the market performance and sustainability. In 2022, in spite a prevalent macroeconomic challenges, the industry grew at about 24.0 per cent compared to the prior period, about a point higher than the rate (22.7%) recorded in 2021. That also was the highest performance recorded in five years since 2018 (NAICOM, 2022).

### ***Claims Management Operation***

Asokere and Nwankwo (2010) define claim as a demand made by the insured person to the insurer for the payment of benefits under a policy. A claim, according to Vaughan and Vaughan (2008), is described as a notification to an amount is due under the terms of a policy. Francis and Butler (2010) describe claim as a defining moment in the relationship between an insurance company and its customer. Insurance claim can therefore be described as an insurer fulfilling its promise of compensation/indemnity to the insured based on the proportion of the risks initially transferred to it as such loss might be purportedly reported by the insured/legal representative according to the contract term between the insured and the insurer (Oladunni and Victor, 2022).

ESRI (2012) posits that the five steps for optimizing the insurance claims process involve organization data; analysis and planning; mobility; management and customer engagement. Goel (2013) was of the opinion that claims processing involves some tasks such as: following up with the claimant or third party for missing documentation and validating that all required claim information has been collected. It was arguably considered thus that claim

managers ought to focus only on the most significant claim tasks that required their attention, and also optimizing the use of their time. The procedures for claims settlement in insurance contract involves prompt claims notification, furnishing of necessary supporting documents evidencing the loss, claims investigation and eventual settlement of claim. The first two procedures are fulfilled by the insured while the last two are duties of the insurer (Oladunni, 2019). Gross claim is used as proxy of claims management operations.

As a fundamental element in the insurance business model, the insurance claims behaviour remains a major determinant of market confidence in the sector. In 2022, the gross claims grew by 7.6 per cent, indicative of a sustained policyholder enlightenment and specific regulatory measures focused on claims settlement. The industry reported gross claims reported of N342billion representing about eight per cent rate of increase compared to its prior position when it stood at N324billion. This is a significant increase even though many times slower than its prior growth in 2021 yet, significantly reflective of prudent underwriting skills being encouraged in the market as macroeconomic and general operational challenges pervades (NAICOM, 2022).

## **Theoretical Review**

### ***Resource Based View Theory***

This theory focuses on the ability of a firm to cut a competitive edge for itself through efficient utilization of resources. (Mahoney & Pandian, 1992). They argue that this is possible when firms manage their resources in such a unique way that its peers cannot imitate, hence creating a competitive barrier. In order to have a sustainable competitive advantage, firms must make sure that its unique resources cannot be mimicked by competitors. Barney (1991) proposes a framework of determining the competitiveness of resources owned by firms: VRIN criteria.

That is, resources must be valuable, rare, in-imitable and non substitutable. According to the resource based theory, a firm's resources which cannot be duplicated by other firms will result to superior performance over the competitors. Over time completion may learn to develop resources similar to the unique resources owned by firm hence the need for firms to continually innovate and reengineer its resources in order to remain competitive to meet future needs of its customers.

Makadok (2001) explains the thin difference between the term resources and capabilities. He defines a firm's capabilities as the special types of resources, specifically those which are specific to it, are non-transferable and embedded to the organization. The sole function of these resources is to enhance the productivity of its other resources. The resource-based view has generated a lot of interest from various management researchers and there is an extensive literature on the same. By insurance companies embracing effective underwriting and claims management operations, they gain a competitive advantage due to improved profitability attainment when premium income is invested with attractive interest rate. Insurance companies are therefore able to compensate policyholders comfortably, when insured risks occur because of favorable government regulation on interest rate with more dividend yield. As supported by Oladunni and Eche (2022), to reap maximum competitive advantage, insurance firms are expected to monitor and adapt to changes in government regulations as involving interest rate in order to charge premium adequately and effectively manage premium fund while settling insured claims.

### **Empirical Review**

Ehiogu (2018) determined the effect of interest rate on profit of insurance companies in Nigeria for the period 1985-2016. Ordinary least square regression analysis was used to analyze the data collected. The study found out that interest rate had a positive and insignificant individual effect on total profit of the Nigerian insurance industry, which implied that interest rate can reduce returns on investment.

Eze and Okoye (2013) carried out a study on the contribution of insurance industry to gross domestic product in Nigeria from 1985-2008. The proxies used for insurance industry were; insurance premium income, total insurance investment and income of insurance development. They applied unit root test, Johansen co-integration test and error correction model in their data analysis to determine the short and long run effect of the model used. The study found out that the insurance premium capital had significantly impacted on economic growth in Nigeria; that total insurance investment had significant effect on economic growth in Nigeria and that there is causal relationship between insurance sector development and economic growth in Nigeria.

Oluwaleye, Shoyemi and Edewusi (2020) reviewed the effects of claims management on profitability of insurance firms in Nigeria with a view to examine the effect of net claim, expense ratio and loss ratio on the return



on asset of listed insurance firms in Nigeria from 2010 to 2018. Time series annual data were collated from financial statement of account of insurance companies. The data were analyzed via regression analysis, which involved ordinary least square estimation technique. The study found that net loss has direct and significant effect on return on asset, expense ratio has positive with an insignificant effect on return on asset and loss ratio has an indirect with an insignificant effect on return on asset of quoted insurance firms in Nigeria. It was concluded that, claims management promote positive influence to insurance companies' profitability in Nigeria.

Murungi (2013) determined the relationship between macroeconomic variables and financial performance of insurance companies in Kenya for the period 2009-2013. The proxy used for insurance performance was return on asset (ROA) while the macroeconomic variables used were real exchange rate, GDP growth rate, change in money supply, average annual lending interest rates and inflation rate. In the study, data was analyzed using descriptive analysis, correlation analysis and multiple regression analysis. The study revealed that interest rate, exchange rate, money supply and size of asset were not statistically significant.

Mwangi (2017) assessed the effect of macroeconomic variables on financial performance of insurance companies in Kenya with the objective to determine the effect of inflation, interest rate and exchange rate on financial performance of insurance companies in Kenya. The performance of insurance firms were analyzed over a period of four years from 2012-2015. The study made use of regression analysis and found out that all the performance indicators were negatively correlated to inflation, average interest rates and average exchange rates.

Ng'ang'a (2016) assessed the relationship between macroeconomic variables and financial performance of insurance industry in Kenya for the period 2006-2015. The financial performance indicator used was return on capital employed while average interest rates as computed by Central Bank rate, GDP growth rate, real exchange rate, inflation rate and unemployment rate were macroeconomic indicators used. The data was analyzed using multiple regression analysis, correlation analysis and descriptive analysis using STATA software. The study found out that GDP growth rate, exchange rate, interest rate and unemployment rate were statistically insignificant and therefore not suitable predictors of the insurance industry's financial performance.

Ogunmuyiwa (2017) investigated the causal relationship between macroeconomic factors and firms' share returns in Nigeria, 2007-2013. The



macroeconomic variables used were inflation rate, interest rate, exchange rate and crude oil price. The study made use of sample of fifty quoted firms on the Nigerian stock exchange. Granger causality test was applied on the data collected and the result showed that all other macroeconomic variables exhibited uni-directional causality with firm share returns except money supply and bi-directional causality with respect to the other three variables.

Okparaka and Makwe (2019) examined the effect of macroeconomic variables on insurance industry growth in Nigeria (2005-2017). The macroeconomic variables used in the study were inflation rate, interest rate and savings rate. Insurance industry growth was determined by insurance penetration, total profit and insurance density of the Nigerian insurance industry. Data used for the study was analyzed using ordinary least square technique and it was found that inflation rate had a positive but insignificant effect on insurance penetration of the Nigerian insurance industry; interest rate had a positive and insignificant individual effect on total profit of the Nigerian insurance industry while savings rate had a negative and insignificant effect on insurance density of the Nigerian insurance industry.

Oladunni and Onuoha (2022) examined the nexus between interest rate and investment income of Nigerian insurance industry. The research design employed was an ex-post facto. Data for the study was collected from the Central Bank of Nigeria Statistical Bulletin and annual publications of the Nigerian insurance digest for 35 years' period, 1986-2020. Using linear regression model, the results revealed that interest rate had a statistical significant positive relationship with investment income of Nigerian insurance industry.

### **Gap in Literature**

This study fills variable gap in existing literature as no existing research measured government regulation directly using interest rate and insurance technical operations (underwriting and claims management). In addition, there exists many findings on insurance underwriting and claims management, but this work provides updated research material by extending time scope to 2022.

## **3. METHODOLOGY**

### **Research Design**

This study adopts ex-post facto design. Longitudinal time series data were used over a period from 1999 to 2022 in order to determine government regulations

on insurance operations in Nigeria. This is suitable for the work given that it is based on an already completed event and the researcher is meant to analyze the outcomes of the already completed event and draw reasonable conclusions (Nwaiwu, 2017). The choice of 1999 as base year was due to the beginning of current uninterrupted democratic rule in Nigeria for 25 years and year 2022 as the end year was because of availability of data for the study.

A descriptive study was used in this study because it helps to reduce bias and maximize the reliability of the data collected. According to Walliman (2011) descriptive study tries to look at things so as to ascertain what the norm, that is, is what can be foretold to happen once more beneath the same circumstances.

### Sources and Nature of Data

Data for this study were sourced from secondary data because of convenience, accuracy and reliability. Therefore, data for this study were strictly extracted from National Insurance Commission (NAICOM) annual market research publications and Central bank of Nigeria Statistical Bulletin. The justification for the use of secondary data in this research is that; it was available which is entirely appropriate and wholly adequate to draw conclusions and answer the question or solve the problem raised in this study.

### Variables and Measurements

**Table 1: Variables and Measurements**

<i>Variable</i>	<i>Proxy</i>	<i>Measurement</i>	<i>Operationalization</i>
<b>Independent Variable</b>			
Government Regulations	LGINTR	Interest rate	Logarithm of interest rate as influenced by government policies
<b>Dependent Variable</b>			
Insurance Operations	LGPRI	Underwriting Operation	Logarithm of gross premium income of insurance industry in Nigeria
	LGCLP	Claims management operation	Logarithm of gross claims paid by insurance industry in Nigeria
<i>Source: Authors' Compilation, 2024</i>			

### Model Specification

The model for this study was specified in line with the work of Ehiogu (2018) which examined the effect of interest rate on profit of insurance companies in Nigeria for the period, 1985-2016. The variables used were interest rate and net profit after tax. Ordinary least square regression analysis was used to analyze the data collected. In recognition of this fact, our multi-linear regression model is thus presented as:

$$LGINTR_t = b_0 + b_1 LGPRI_t + b_2 LGCLP_t + \mu_t$$

This model is operationalized in a log-linear econometric construct to imbibe the coefficients of elasticity of the variables while lessening the probable effect that any outlier may have as operational in variable measurement in table 1 Where  $LGINTR = \text{Log of interest rate}$ ,  $LGPRI = \text{Log of gross premium income}$  and  $LGCLP = \text{Log of gross claims paid}$ ,  $\mu = \text{disturbance term}$ ,  $b_0$  is a constant parameter;  $b_1$  is the explanatory variable and  $t$  is the time trend. These are usually included in a standard time series specification to account for omitted variables as well as unexplained random effects within the model.

### Data Analysis Technique

A multi-linear regression technique was adopted using on ordinary least square method. The data were tested for unit roots using Augmented Dickey-Fuller Test, and the model parameters were evaluated for goodness of fit using F-statistic,  $R^2$ , Adjusted  $R^2$ , and Durbin-Watson statistic. The hypothesis was tested at 5% level of significance using p-value and t-statistic.

## 4. DATA PRESENTATION AND ANALYSIS

The data generated for this study were transformed into logarithm and various analysis were carried out.

### Descriptive Statistics

**Table 2: Descriptive Statistics**

	<i>LGINTR</i>	<i>LGPRI</i>	<i>LGCLP</i>
Mean	0.969365	5.208117	4.645933
Median	0.983505	5.318819	4.740000
Maximum	1.221936	5.897434	5.542109
Minimum	0.623957	4.330301	3.750000
Std. Dev.	0.157617	0.452331	0.586806

	<i>LGINTR</i>	<i>LGPRI</i>	<i>LGCLP</i>
Skewness	-0.524067	-0.407436	-0.181510
Kurtosis	2.637001	2.047190	1.714654
Jarque-Bera	1.230351	1.571864	1.783898
Probability	0.540546	0.455695	0.409856
Sum	23.26475	124.9948	111.5024
Sum Sq. Dev.	0.571395	4.705875	7.919848
Observations	24	24	24

Source: E-View 10.0 Output (2024)

Table 2 shows that number of observations under the study was 24; the average value of interest rate is 0.969365 with a standard deviation of 0.157617. The maximum and minimum values stood at 1.221936 and 0.623957 respectively.

Considering insurance operations using underwriting operation a proxy, the average value is 5.208117 while the standard deviation, minimum value and maximum value stood at 0.452331, 4.330301 and 5.897434 respectively. The claims management operation provides 4.645933 average value with 0.586806 standard deviation and 5.542109 maximum and 3.750000 minimum value respectively.

In measuring dispersion of the variables, the highest and lowest values are claim operation and interest rate with -0.181510 and -0.524067 skewness values respectively. The skewness values at negative for all variables shows the data distribution is negatively skewed.

Looking at the peakedness of the distribution, interest rate has the highest kurtosis values of 2.637001 follow by underwriting operation with 2.047190. This implies that data distribution is mesokurtic.

### ***Pre-liminary Test: Unit Root***

**Table 3: Unit root tests summary results: Augmented Dickey-Fuller (ADF) Test**

<i>Variable</i>	<i>t- statistic</i>	<i>Prob. (F-statistic)</i>	<i>Durbin-Watson stat</i>	<i>p - value</i>
LINTR	-1.673931	0.108975	1.709954	0.109
LGPRI	-2.158821	0.052587	1.678805	0.0526
LGCLP	-0.699073	0.003709	2.310084	0.494

Source: Extracted from E-view data output on ADF tests, 2024

The preliminary tests conducted showed stationarity of the variables as indicated summary results extracted from the e-view output data depicted in Table 3. The p-values are greater than 0.005, therefore there are element of unit roots in the variables. However, since there is no disparity in the order of integration for all variables the data of the model was processed at a year percentage change mode using the least square method. The output data are shown in Table 4.

**Hypothesis Testing**

**Table 4: Regression Analysis Results**

Dependent Variable: LGINTR  
 Method: Least Squares  
 Date: 06/10/24 Time: 17:15  
 Sample: 1 24  
 Included observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.241420	0.347729	6.445876	0.0000
LGPRI	-0.190345	0.167870	-1.133884	0.2696
LGCLP	-0.060422	0.129400	-0.466942	0.6453
R-squared	0.584031	Mean dependent var		0.969365
Adjusted R-squared	0.544415	S.D. dependent var		0.157617
S.E. of regression	0.106387	Akaike info criterion		-1.526997
Sum squared resid	0.237682	Schwarz criterion		-1.379740
Log likelihood	21.32396	Hannan-Quinn criter.		-1.487930
F-statistic	14.74229	Durbin-Watson stat		1.328943
Prob(F-statistic)	0.000100			

Source: E-View 10.0 Output, 2024

**Table 5: Selected Global utility statistics summary and decisions**

Parameter	Statistic	Decision
R-squared	0.584031	58.40% of changes in LGPRI and LGCLP were explained by changes LGINTR (an average good fit relationship)
Adjusted R-squared	0.544415	54.44% of changes in LGPRI and LGCLP were explained by changes LGINTR after adjustments (an above average good fit relationship)
Prob (F-statistic)	0.0001	A good fit; less than 0.05 benchmark. This shows the model can be used for future forecast.
Durbin-Watson stat	1.328943	A good fit relationship, the benchmark of 2 is above this statistic. Thus, there is no autocorrelation in the model.

Source: Authors' compilation from Table 4

The p-value of 0.2696 and 0.6453 which were greater than 0.005 for LGPRI and LGCLP attested that there is no statistically significant relationship between government regulations (measured using interest) and insurance operations (proxies by underwriting and claims operations).

## **DISCUSSION OF FINDINGS**

This study aimed at answering two pertinent questions: can it be affirmed that interest rate has significant influence on insurance underwriting operation in Nigeria? How has interest rate significantly contribute to claims management of insurance companies in Nigeria?

From the results, government regulations in Nigeria vis-à-vis interest rate has not created conducive environment for insurance operations to thrive sufficiently when compared with other developing countries like South Africa. The rate of insurance penetration in Nigeria has been regarded as one of the lowest and worst in Africa with a 0.5% penetration rate as of March, 2022 (NAICOM, 2024).

The findings of this study on the relationship between government regulations and insurance operations supported the findings of Onuoha and Oladunni (2022), Mwangi (2017), Murungi (2013), Ehiogu (2018) who found a negative statistical insignificant relationship between insurance penetration, interest rate, investment and economic growth in Nigeria. The authors viewed insurance penetration as function of insurance operations through underwriting and claims management in relation with favorable government regulations that create conducive environment for insurance operation to thrive in the country. However, insurance operation in Nigeria is hampered by government regulations on unstable macroeconomic variables such as interest rate. The need for macroeconomic environment stability is an essential prerequisite for insurance operations. Regrettably, the World Economic Forum (2015) correctly commented that poor infrastructure, corruption and access to financing due to unfavorable interest rate are the most problematic factors for doing insurance business in Nigeria.

## **5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

### **Summary of Findings**

This study showed that:

- (i) Government regulations through policies on interest rate no statistical significant effect on insurance underwriting operation in Nigeria
- (ii) There was no statistical significant relationship between interest rate and insurance claims management operation in Nigeria.

## **Conclusion**

Government regulations provide conducive environment for financial institutions as finance intermediators to operate effectively and efficiently. Insurance as financial institution performs risk management functions through risk transfer in form of underwriting and indemnity/benefits payout through claims management. The Nigerian economy needs strong institutional/regulatory framework that will entrench respect for the rule of law, enhancing patriotic behaviors, which trigger entrepreneurial character and innovations towards achieving effective insurance underwriting, and claims management operations. The insuring public are more likely to be satisfied and tend to trust insurance more if government regulations promote insurance penetration and instils discipline in insurance industry players.

## **Recommendations**

Based on the findings, we recommend that:

- (i) Government regulations in Nigeria should encourage insurance attraction to the public. This can be achieved through formulation of monetary policies that give room for project financing with considerable interest rate that attaches compulsory insurance on same to avoid risk of repayment default.
- (ii) Insurance operations through underwriting and claims management can only become realistic when enabling government laws on insurance transactions are implementation. Laws should be formulated with punitive measures on erring insurance players within Nigerian insurance industry who violate ethical standard of operation.
- (iii) Government regulations should be tailored towards encouraging innovative insurance products that meet the needs of the insuring public, use of relationship marketing strategies and establishment of adequately capitalized insurance firms. This will improve insurance contribution significantly to economic growth in Nigeria.



### References

- Aliyu, A. J. & Dahiru, H. B. (2022). Interest rate pass-through in Nigeria: An asymmetric cointegration approach. *CBN Journal of Applied Statistics*, 12(1), 23-62.
- Asokere, A. S. & Nwankwo, S. I. (2010). *Essential of insurance: A modern approach* (1<sup>st</sup> ed.). Lagos: Fevas Publishing.
- Bangura, L. (2011). Adjustment of commercial banks' interest rates and the effectiveness of monetary policy: evidence from Anglophone West Africa (Doctoral dissertation, Rhodes University).
- Caren, B. A. & Mirie, M. (2017). Effects of Underwriting and Claims Management on Performance of Property and Casualty Insurance Companies in East Africa. *European Scientific Journal*, 13(13), 358-373.
- Ehiogu, C. P. & Nnamocha, P. N. (2018). Effect of Interest Rate on Profit of Insurance Companies in Nigeria, *International Journal in Management and Social Science*, 6(7), 2321-2338.
- Environmental Systems Research Institute (2012). GIS for the insurance claims process: five steps for an effective workflow. ESRI Whitepaper.
- Fomum, T. A (2011). Interest rate pass-through in Cameroon and Nigeria: A comparative analysis [Master's Thesis, Rhodes University]. <https://core.ac.uk/download/pdf/145046277.pdf>
- Francis, P. & Butler, S. (2010). *Cutting the cost of insurance claims and taking control of the process and strategy*. <http://www.booz.com>.
- Goel, C. (2013). *Insurance claims management: improving staff capacity using BPM*. London: Cognizant Business Consulting.
- Investopedia (2024). Monetary Policy Meaning, Types, and Tools. <https://www.investopedia.com/terms/m/monetarypolicy.asp>
- Ivan, K & Jennifer, L. (2023). Understand the meaning of a regulation. <https://study.com/academy/lesson/types-of-regulation-privatization-deregulation.html>
- Kelilume, I. (2014). Effects of the monetary policy rate on interest rates in Nigeria. *International Journal of Business and Finance Research*, 8(1), 45-55.
- Mangwengwende, T. M. (2011). The relationship between bank concentration and the interest rate pass through in selected African countries. Unpublished Master of Commerce (Financial Markets) Thesis, Department of Economics and Economic History, Rhodes University, Grahamstown, South Africa.
- Maverick, J. B. (2022). Do changes in interest rates affect the profitability of the insurance sector? <https://www.investopedia.com/ask/answers/061515/how-much-do-changes-interest-rates-affect-profitability-insurance-sector.asp>

- Mishkin, F. S. (1996). The channels of monetary transmission: Lessons for monetary policy No. W5464, Cambridge, MA, National Bureau of Economic Research Inc.
- Mordi, C. N., Adebisi, M. A., & Omotosho, B. S. (2019). Modelling interest rates pass through in Nigeria: An error correction approach with asymmetric adjustments and structural breaks. In *Contemporary Issues in the Nigerian Economy: A Book of Readings*. Central Bank of Nigeria.
- National Insurance Commission (2022). 2022 Insurance Market Performance. <https://storage.naicom.website/naicom/files/ed8a8a07ec8385157579253ca98fc398.pdf>
- Ogundipe, A., & Alege, P. O. (2013). Interest rate pass-through to macroeconomic variables: The Nigerian experience. *International Journal of Economics and Finance*, 5(10), 18-35.
- Oladunni, O. E. (2019). Proposal for establishment of personal accident insurance policy in ABU Business School, Ahmadu Bello University, Zaria. *An M.Sc. Assignment*, Enugu State University of Science and Technology, Edeano, Enugu-Nigeria.
- Oladunni, O. E. (2021). Impact of reinsurance operations on financial performance of insurance companies in Nigeria. (Unpublished master's dissertation). Enugu State University of Science and Technology, Edeano, Enugu-Nigeria.
- Oladunni, O. E., & Eche, A. U. (2022). Impact of reinsurance underwriting operations on assets management of insurance companies in Nigeria. *International Journal of Research and Innovation in Social Sciences*, 6(4), 604-613.
- Oladunni, O. E., & Okonkwo, I. V. (2022). Impact of risk retention on claims management of insurance companies in Nigeria. *FUOYE Journal of Finance and Contemporary Issues*, 3(1), 63-79.
- Oluwaleye, T. O., Shoyemi, O.S & Edewusi, D. G. (2020). Effects of claims management on profitability of insurance companies in Nigeria. *British Journal of Management and Marketing Studies*, Volume 3 (4), 106-114.
- Onuoha, D.C., & Oladunni, O. E. (2022). Nexus between interest rate and investment income of Nigerian insurance industry (1986 – 2020). *Journal of International Accounting*, 1(3), 53-64.
- Promislow, S. D. (2011). *Fundamentals of Actuarial Mathematics* (2<sup>nd</sup> edition). United Kingdom: John Wiley and Sons Ltd.
- Sanction Scanner (2024). Impacts of Government Regulations on Businesses. <https://www.sanctionscanner.com/blog/impacts-of-government-regulations-on-businesses-312>.
- Sanusi, A. (2010). Interest rate pass-through and the efficiency of monetary policy in Nigeria: 2002-2010. In 1<sup>st</sup> National Conference on State of the Nigerian Economy, Bayero University Kano November 4th-6th.

- Vaughan, E. J., & Vaughan, T. M. (2008). *Fundamental of risk and insurance*. USA: John Wiley Sons & Inc.
- World Economic Forum (2015). Global competitiveness report: 2015-2016. Geneva: IMF publications.<http://reports.weforum.org/global-competitiveness-report-2015-2016/introduction/>
- Yusuf, T. O. & Dansu, F. S. (2018). The effect of claim cost on insurers' profitability in Nigeria. *International Journal of Business and Commerce*, 3(10), 1-20.