

IMPLICATIONS OF SELECTED MACROECONOMIC INDICATORS ON INSURANCE CLAIMS COMPENSATION IN NIGERIA, 1983-2024

***Chinedu Callistus Onyia, PhD**

Department of Banking and Finance, Faculty of Management Sciences, Enugu State University of Science
and Technology (ESUT), Agbani, Nigeria

Corresponding Email: chinedu.onyia@esut.edu.ng

DOI: <https://doi.org/10.5281/zenodo.17417232>

Abstract

This paper study's the implications of macroeconomic indicators on Insurance Claims payment in Nigeria 1983-2024. Precisely the study surveyed the implications of inflation rate on insurance claims payment in Nigeria, Investigate the implications of interest rate on insurance claims payment in Nigeria, Assess implications of foreign exchange rate on insurance claims payment in Nigeria, find out the effect of poverty rate on insurance claims payment in Nigeria. The study adopted ex-post facto research design and data used for the study was the year account statements of National Insurance Commission (NAICOM), Nigerian Insurance Digest and Central Bank of Nigerian within the period of 1983 to 2024. Ordinary least square method (OLS) was used in testing the hypotheses formulated. The study revealed that Inflation rate with ($pvalue=0.0655>0.05$) have positive and non significant effect on total claims paid by insurance industry in Nigeria; Interest rate with ($pvalue=0.0042 < 0.05$) have positive and significant effect on total claims paid by insurance industry in Nigeria. Foreign exchange rate with ($pvalue=0.0061<0.05$) have positive and significant implications on total claims paid by insurance firms in Nigeria, Poverty rate with ($pvalue= 0.1061>0.05$) have positive and non significant implications on total claims paid by insurance firms in Nigeria. The study recommended among others that Insurers should be advised to have different investment portfolio. Government must always make use of its fiscal and monetary policies to maintain a low interest rate to support investors in insurance companies. Foreign exchange risk can be mitigated by ceding higher percentage of large risk or risks with high influence on foreign re-insurers.

Keywords: Re-insurers, Foreign exchange rate, NAICOM, Insurance Digest and Macroeconomics.

Introduction

The financial institutions in Nigeria were faced with many uncertainties. The level at which goods are exchanged, services rendered and claims settled in insurance industry are considered very important as their performances have implications on other sectors. The contractual responsibility of insurance firm

are claims imposed by the receipt of premium from the insured which is the contractual responsibilities and a requirements for a binding contract (NDIC, 2023). Settlements of claims, is an important aspect of insurance firms and has been greatly affected due to the uncertainties in macroeconomic indicators. The portfolio of risks underwritten by insurers are of different dimensions, which means that they are capable of been influenced by inflation in many ways and normally by different indicators (Jim and Will, 2023). Property insurers have been faced with rise in the costs of raw material, labour and other less important costs as a reason of long time reinstatement periods (Jim and Will, 2023). Inflation is critical to insurers because it enables specific estimation of financial reserves for claims reason which assist in deciding a fairly and adequate pricing.

Insurance claims payment is a payment or other indemnification from an insurance provider to an insured to resolve an insurance claim (Stefan, 2023). It is a declaration made by the person who bought insurance product from to the insuring company to make payments accordingly as a result of from an insured loss. On the other hand, claim is critical in protruding the image of insurance and how the public view insurers (Crawford, 2007).

Insurance company again sees claim deal as a way of enhancing customer base, serve as an important reason against competitors and also increases her profitability (Capgemini, 2011). As more customers are added to the company, the more premium are paid. For that reason, the best and fast means of managing claims in insurance mostly, fire claims is to persistently educate the insuring community which will make available information of fire and related cost to minimize claims (Agbo, Okeke and Okeume, 2022)

Insurance is of growing importance due to its rising share in the financial sector productivity. It is a resting place for economic sectors and therefore, many view it as helping other sector like: manufacturing and service oriented sectors. In the years back the insurance system has been known as an important element for every economic activity. Insurance is a cooperative tool that redistributes losses among insured groups against insured risk (Rejda and McNamara, 2014). Insurance is a shelter that provides comfort to any other sector that takes refuge in it and is considered very important as its performance will inversely have an effect on other sectors, especially those that are unstable.

Statement of the Problem

Paying claims is a legal obligation and a contractual duty. Historically, insurers don't honor claims due to many reasons like risk of insolvency, macroeconomic influence among others. Effort to avoid the above development, various legislation had been put in place which include; reserves requirements, and increasing operating capital base of insurers. Insurance Act allows percentage of reserves to be invested by insurers. How is the invested fund operate given the role of macroeconomic variables and what effect does it have on claim experience?

Many studies strongly, cautioned insurers to exercise self-control in investing reserves because of solvency regulation given the risk of macroeconomic indicators. Again, studies have shown that there are

forms of association between macroeconomic variables and insurance companies in Nigeria. Unfortunately, most of the studies examined effect of macroeconomic variable on insurance growth and insurance performance. A small number of the observed study focused on; “effect of macroeconomic indicators on insurance claims payment” with different macroeconomic variable. In response to the question earlier asked and paucity of empirical evidences, this study to further investigate implications of macroeconomic indicators such as; inflation rate, interest rate, foreign exchange rate and poverty rate on insurance claims in Nigeria from 1983 – 2024 for more robust and currency.

Objectives of the study

The far-reaching objective of this study was to find out the implication of selected macroeconomic indicators on insurance claims payment in Nigeria. The precised intentions of the study were to;

- i. Evaluate the implications of inflation rate on insurance claims payment in Nigeria.
- ii. Find out the influence of interest rate on insurance claims payment in Nigeria.
- iii. Assess the implications of foreign exchange rate on insurance claims payment in Nigeria.
- iv. Determine the influence of poverty rate on insurance claims payment in Nigeria

Research Questions

The study developed four questions in other to achieve the objectives:

- i. How have inflation rate implicated insurance claims payments in Nigeria?
- ii. To what extent has interest rate influence insurance claims payment in Nigeria?
- iii. How has foreign exchange rate influenced insurance claims payment in Nigeria?
- iv. What level has poverty rate influence insurance claims payment in Nigeria?

Statement of Hypotheses

- i. Inflation rate have positive and considerable implications on insurance claims payment in Nigeria.
- ii. Interest rate has positive and sizable influence on insurance claims payment in Nigeria.
- iii. Foreign exchange rate has positive and substantial influence on insurance claim payment in Nigeria.
- iv. Poverty rate have positive and influential impact on insurance claim payment in Nigeria.

REVIEW OF RELATED LITERATURE

● Conceptual Review

Insurance Claims

Claim is a key service-standard used to attract customers (Ramakrishnan, 2023). Claim is a request to be paid by insurance firms to their customers (NDIC 2023). Insurance is a form of risk management used to evade the risk of a contingent loss (Deyganto and Alemu, 2019). Insurance is transferring risks from one entity to another for a price known as premium (Ullah, Faisal, and Zuhra, 2016). Insurance companies operations may be influenced by microeconomic variables or macroeconomic variables either positively or negatively on its their growth (Berhe, and Kaur, 2017).

Classes of Claims in insurance:

1. Health Insurance Claims:
2. Property Insurance Claims:
3. Claims in Life Insurance:
4. Maturity Claim:
5. Death Claim:
6. Motor insurance Claims.

Claims Process

There are conditions prescribed in every policy of insurance how to file for payment loss insured occurred and has to be complied with for a successful settlement (Oluoma, 1999). The process of claims is activated the moment an insured suffers a loss caused by the peril named in the policy and notice of the loss is made known to insurance firm. The journey continues through investigation to the point where payment is made and discharge form is completed. Claims process comes with a responsibility on the person making claim and the insurance firms, section 70 of Insurance Act 2003. It is important for the claimant to observe the obligations which is fundamental to the success of the settlement. The duties of a person claiming against the insurer include:

- i. give notice of loss to the insurance company
- ii. act as uninsured; reasonable prevention of further damages,
- iii. providing supporting evidence of loss (proof/particulars of the loss)

While the obligations imposed on the insurance company are:

- i. Review
- ii. Investigation
- iii. Negotiation
- iv. Indemnification
- v. Discharge
- vi. Subrogation/Recovery (if applicable)

Types of Insurance Policies

Fire Insurance; two kinds of cover exist name:

Cover for Private Houses and Contents: This kind of insurance protects destruction of private houses or dwelling and their contents. The contents usually covered are household goods and personal effects.

Motor Insurance

Marine Insurance

Macroeconomics Variables

Poverty Rate

World Health Organization, (2019) suggests that many households surpasses their health care financial plan and average of 1.4% of the world's population, drop under the poverty class. Poverty and insurance

interaction had generated series of debate due to social impact of poverty (Aboagye et al., 2022). The intention of purchasing any insurance policy is for protection purposes against risks (Aytekin and Karamaşa, 2017). The hope of the poor is settlement of claims often, the cost skyrockets beyond expected (Ahmed et al., 2016). It is necessary to integrate insurance into social protection scheme especially, to safeguard those in employment from the risk of poverty (Dang et al., 2021).

Inflation Rate

Inflation portrays condition of a universal and constant raise in the value of commodities and services, (wikipedia, 2020). Inflation affects both life insurance and general insurance business in diverse ways. Inflation brings about increase claim cost produces negative consequences on insurer's profit margin. Inflation is often accompanied by rising interest rates, which reduce the value of return guarantees. Ellen (2024) state that inflation is an evaluation of the speed of rise in prices of commodities and can be influenced by varieties of factors. Factors responsible include: rise in production costs (raw materials, labour), demand and fiscal and monetary policies (tax cuts, lower interest rates).

Interest rate

This is the return for parting with lenders' funds. Interest is the additional income accrued on investment, when low rate is charged on loan to encourage investors and encourage savings (Obadeyi, Akingunola and Afolabi, 2013).

Interest is a rate charged in proportion of the amount borrowed for a given period. It is a rent payable by the borrower to the lender for parting with the lenders money (CBN, 2016). It serves as a vehicle for financial intermediation. Interest rate influences investment and savings as we as dictates the movement of money between the lenders and borrowers (CBN, 2016).

Foreign Exchange Rate

Foreign exchange rate describe the worth of a country's money to another or the trade relationship between currencies. Nigeria like most other countries make the United States of America currency (dollar) the benchmark exchange rates in addition of other countries currency. Various factors could impact the consumption of foreign currency such as: devaluation, speculation and transaction pressure (Dooley, 1995),

Theoretical Framework

Expected Utility Theory

The theoretical of this study is anchored expected utility theory by Daniel B of 1738. The theory explains the reason people make certain decision amidst uncertainty. He opines that human beings are rational and would favour an expectation with likely more satisfactory opportunities. Hence, man decisions with the knowledge that the future output may differ from the expected is largely controlled satisfactory appeal of an expectation. The belief of a probable positive result from a man's act is the key drive of any decision even without assurance.

The justification for the adoption of this theory was because it explains the basis of human decisions/actions in a challenging uncertainty. The implication is that man will be motivated to invest or take risk where the expected return surpasses the input resources. Buying insurance product is a good example of expected utility theory. If man is certain that he will not suffer negative consequences it will be wasteful to pay insurance premium but because of uncertainty of the actual outcome and if it is negative, will have substantial impact which indicates the willingness to pay a token as premium for a defined level of financial security.

Empirical Review

Inflation Rate

Monday and Abbas (2023) compared effect of two analytic models ARDL and VEC on the selected macroeconomic forces on gross domestic product, Nigeria. They aimed to find if there exist long run and short run effect on Nigeria GDP. The variables of interest are: GDP, Unemployment, Exchange, and Interest rate. The ARDL test indicated that; Unemployment rate, had an influential link (short and long run) with GDP and VEC test showed insignificant link in short run. They recommended the adoption of both models for prediction.

Ojeh, Nwogwugwu and Ozoh (2020) studied factors that impacts inflation in Nigeria. It was found that inflation had strong consequence both at short and long-run. They made suggestion how revive the naira in other and increase real gross domestic product.

Chandrasekaran and Ramakrishnan (2023) explored influence of inflation on claims and reinsurance. The finding indicates that inflation influences all classes of insurance and reinsurance business recovery and recommended the need to consider all the various external factors that will impact claims reserving process bearing in mind an appropriate reserve method, especially inflation. The assertion was that the faster a claim is settled, the lesser the consequences of inflation cost.

Interest Rate

Mgbomene and Igben, (2023) examined the influence of interest rates and exchange rate on economic growth of Nigeria. The method of data analysis adopted was ECM. The discovered that the lending rate lessens economic development without a substantial impact while exchange rate had negative and marginal consequences on economic development. Savings and investment supports economic growth strongly. They recommended monetary policies that will encourage of savings and one digit interest rate.

Foreign exchange rate

Thabiso, (2023) explored macro-economic and firm-specific determinant of monetary performances of non-life companies in 48 African countries. Least square and two-step System generalized moment estimators were the tools employed to evaluate the data collated. It was discovered some macro-economic indices were dominant in shaping monetary performances. He recommends in-cooperation of these forces in decisions making.

Offiong, James, Etim, Enuoh, Bessong and Omang (2020) studied how exchange rate volatility impacts business transaction in Nigeria. Instrument employed to analyze data was vector error correction model. The objective was to find out the influence of currency rate instability on insurance. The result indicated a strong positive long term effect on insurance well-being. A fixed rate of exchange was suggested to curtail profiteering.

Poverty Rate

Liudmila, et al., (2022) examined correlation forces between poverty and insurance in an emerging market. Purpose of the work was establishing the connection and interdependencies between basic financial distinctiveness of low-income families and their tendency for buying insurance to minimize the possibility tragic losses. Time-series model approach was utilized while the results found showed that: i. insurance and family income is not related. ii. Insurance and family savings is related. Managers were advised to develop insurance products for the low-income earners.

FairByDesign, (2023) accessed causes, extent and impact of the poverty premium in the insurance sector with the objective of an informed knowledge of the causes, extent and impact of the poverty premium in insurance. The result showed that vulnerability and low income clients are charged higher premiums and in some circumstance denied insurance. Many factors like location, medical history among others have been the reasons for such decisions.

Methodology

Research Design

The research adopted *ex-post facto* design. *Ex post facto* design is an investigation which deals with the past information (Salkind, 2010). The choice was because it denies the researcher the ability to interfere with data.

Sources of Data

We sourced information through secondary means, from archives of bodies empowered by law to regulate and supervise the activities of insurances in the country. Specifically, year account statements of: National Insurance Commission (NAICOM), Nigerian Insurance Digest and Central Bank of Nigerian.

Model specification

A model is an illustration of reality which can assume graphic, physical or mathematical form. Mathematical model uses symbol, equations and formulae to reveal the truth (Onwumere, 2009). Importance of model is providing results of possible alternative to solve a given problem and when it incorporates several predictors it becomes multiple regression (Lucey, 2002). She further states, that the purpose of adding to the two variable models was to better the fit of the information. The formula is represented: $y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots \beta_kX_k + \varepsilon$ (i)

Where:

Y = Dependent variable

X₁, X₂,X_k = Independent variables

β_0 = Constant parameters

$\beta_1, \beta_2, \dots, \beta_k$ = coefficients of the respective

ε = error term

The study modified the model use in Okparaka and Makwe, (2019) “effect of macro-economic factors on insurance industry development (2005-2017)” in accordance with the on-going work:

$TCP = f(UMR, INFR, INTR, FORR, INDS)$

The model is specified as follows:

$TCP_t = \beta_0 + \beta_2 INFR_t + \beta_3 INTR_t + \beta_4 FORR_t + \beta_1 POVR_t + u_t$

Where:

TCP = Total claims paid

INFR = Inflation rate

INTR = Interest Rate

FORR = Foreign Exchange Rate

POVR = Poverty rate

β_0 = Constant parameters

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficient parameter of *INFR, INTR, FORR, POVR*

μ = error term

t= time

Description of Variables used in the Model

i. Dependent variable is the total claims paid, coded TCP in the equation. Amount of claim paid to insurance policy holders for a specified period..

ii. Independent variables are:

INFR means inflation which is the percentage increase or decrease in prices of merchandise and services

INTR is interest rate and it is defined as the percentage amount paid on the principal amount borrowed.

FORR means foreign exchange rate in the equation. This is rate at which the naira exchanges for foreign currency

POVR represent poverty which measure number of underemployed persons.

i. β_0 symbol is constant in the equation

ii. $\beta_1, -\beta_4$, are regression coefficients associated with each of the four independent variables.

iii. μ , refers to error term.

iv. t= Time series data

ANALYSIS OF DATA

Data Analysis

Unit Root Test

Effort to establish stationarity to ensure the absence of unit root issues, data was examined using the Augmented Dickey- Fuller (ADF) test (Dickey and Fuller 1981). The Augmented Dickey Fuller (ADF)

procedure was applied in testing for existence of unit root or stationarity of time sequence data and the order of integration of the variables.

Augmented Dicker- Fuller (ADF) tests on the series reveals the number of times the non-stationary time series are to be differenced to attain stationarity. The results are presented in table below.

Table 4.2.1: Augmented Dickey Fuller (ADF) Unit Root Test Results

Variables	Test statistics	Test critical values			Status
	ADF	1%	5%	10%	Stationarity
LOGTCP	0.379053	-4.420595	-3.259808	-2.771129	1(1)
LOGINFR	-3.179029	-4.420595	-3.259808	-2.771129	1(1)
LOGINTR	-2.081134	-4.420595	-3.259808	-2.771129	1(1)
LOGFORR	-3.420595	-4.420595	-3.259808	-2.771129	1(1)
LOGPOVR	-1.820545	-4.420595	-3.259808	-2.771129	1(1)

Source: Researcher's computation using E views, 2022.

From table 4.2.1 the null hypothesis of a unit root is $H_0: a = 0$ versus the alternative: $H_1: a < 0$. The ADF unit root test result presented above confirms that stationarity was achieved for all variables at the first difference.

4.2.2 Descriptive Analysis

Table 4.3: Descriptive Statistics

	LOGFORR	LOGINFR	LOGINTR	LOGTCP	LOGPOVR
Mean	0.976571	0.834034	2.315346	0.107429	2.584729
Median	0.950000	0.901010	2.541600	0.070000	2.602600
Maximum	1.460000	1.268411	3.745800	0.430000	3.258000
Minimum	0.620000	0.137630	0.587700	0.010000	1.813100
Std. Dev.	0.189984	0.307098	0.914789	0.092620	0.274657
Skewness	0.581798	-0.925987	-0.400284	2.378217	-0.468926
Kurtosis	3.148959	2.879342	1.806825	8.333017	4.234974
Jarque-Bera	2.006878	5.023030	3.010842	74.46941	3.506891
Probability	0.366617	0.081145	0.221924	0.000000	0.173176
Sum	34.18000	29.19119	81.03710	3.760000	90.46550
Sum Sq. Dev.	1.227189	3.206515	28.45251	0.291669	2.564842
Observations	35	35	35	35	35

Source: Researcher's computation using Eviews -10, 2022

Table 4.3 reveals, most importantly, the mean, maximum and minimum values for the series. While the mean of the series stood at 0.98%, 0.83%, 2.32%, 0.11% and 2.58% for LOGFORR, LOGINFR, LOGINTR, LOGTCP and LOGUPOVR respectively, the maximum of the series stood at 1.46%, 1.27%, 3.74%, 0.43% and 3.26% respectively. The minimum of the series stood at 0.62%, 0.31%, 0.91%, 0.09% and 0.27% for LOGFORR, LOGINFR, LOGINTR, LOGTCP and LOGPOVR respectively.

The skewness coefficients of all variables, except LOGTCP, have values less than 1. This indicates a normal frequency distribution.

Similarly, Kurtosis coefficient shows that LOGTCP and LOGPOVR have an abnormal distribution with coefficients higher than 4. But Jarque-Bera statistic which reveals that frequency distribution is not normal when the p-value is significant also support the findings from the skewness as all variables indicate insignificant p-value greater than 0.05.

● Test of Hypotheses

Hypothesis one

Ho1: Inflation rate does not have positive and considerable influence on insurance claims payment in Nigeria.

Ha1: Inflation rate have positive and considerable influence on insurance claims settlement in Nigeria.

Decision Rule

Reject (H_0), where p-value of t-statistics is equal to or less than 0.05. Otherwise accept the null hypothesis and reject the alternate hypothesis

OLS Regression Model Estimation Results

Table 4.3 Result of the Regression for Hypothesis one

Dependent Variable: (LOGTCP)

Method: Least Squares

Date: 08/19/23 Time: 18:32

Sample (adjusted): 2005 2024

Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.186016	0.205228	0.906385	0.3741
LOGINFR	0.116256	0.060109	1.934088	0.0655
LOGINTR	6.243698	1.830203	3.411477	0.0042
LOGFORR	0.274973	0.081356	3.379886	0.0061
LOGPOVR	0.232127	0.138015	0.191121	0.1061
R-squared	0.754029	Mean dependent var		0.042962

Adjusted R-squared	0.683752	S.D. dependent var	0.943386
S.E. of regression	0.530522	Akaike info criterion	1.791022
Sum squared resid	3.940345	Schwarz criterion	2.039559
Log likelihood	-12.01471	Hannan-Quinn criter.	1.833084
F-statistic	10.72934	Durbin-Watson stat	1.706526
Prob(F-statistic)	0.000342		

Source: E-views 9 output, 2023

The regression result above in table 4.3 indicates that inflation rate (INFR) has positive and no considerable influence on total claim paid by insurance industry (TCP). The decision criterion is to accept the null hypothesis if the probability of the t-statistics > 0.05 , otherwise, reject the null hypothesis and accept the alternate hypothesis. The outcome shows the probability of the t-Statistic of 0.0655 which is greater than 0.05. Therefore, we reject the alternate hypothesis and accept the null hypothesis that INFR does not have significant effect on on insurance claims settlement in Nigeria.

Hypothesis Two

Ho2: Interest rate does not have positive and sizable influence on insurance claims payment in Nigeria.

Ha2₁: Interest rate has positive and sizable influence on claims management of insurance claims payment in Nigeria.

Decision Rule

Reject the null hypothesis (H_0), if the p-value of the t-statistics is equal to or less than 0.05. Otherwise accept the null hypothesis and reject the alternate hypothesis.

Table 4.3 was used to test the Hypothesis

The regression result above in table 4.3 indicates that interest rate (INTR) have a positive coefficient, which implies that it has a positive effect on total claims paid (TCP). Furthermore, the p-value is 0.0042, which is less than 0.05. In the overall, interest rate have positive and non-sizable influence on insurance claims payment in Nigeria.

Hypothesis three

Ho3: Foreign exchange rate does not have positive and considerable influence on insurance claims payment in Nigeria.

Ha3: Foreign exchange rate have positive and considerable influence on insurance claims payment in Nigeria.

Decision Rule

Reject the null hypothesis (H_0), if the p-value of the t-statistics is equal to or less than 0.05. Otherwise accept the null hypothesis and reject the alternate hypothesis.

Table 4.3 was used to test the Hypothesis

The regression result above in table 4.3 indicates foreign exchange rate of p value has 0.0061 which is less than t-statistics 0.05%, which show that it has positive and significant implication on total claims paid by insurance industry in Nigeria. Given the above, the alternate hypothesis is accepted and the null hypothesis rejected. Therefore, foreign exchange rate has positive and considerable implication on claims payment in insurance industry

Hypothesis Four

Ho4: Poverty rate does not have positive and influential implications on insurance claims payment in Nigeria.

Ha4: Poverty rate has positive and influential implications on insurance claims payment in Nigeria.

Decision Rule

Reject the null hypothesis (H_0), if the p-value of the t-statistics is less than 0.05. Otherwise accept the null hypothesis and reject the alternate hypothesis.

Table 4.3 was used to test the Hypothesis

The regression result above in table 4.3 indicates that poverty rate of pvalue 0.1061 which is greater than 0.05 shows that poverty rate has positive and no influential implications on total insurance claims paid. The decision criterion is to accept the null hypothesis if the probability value is > 0.05 , otherwise, reject the null hypothesis and accept the alternate hypothesis. Therefore, we reject the alternate hypothesis and accept the null hypothesis that poverty rate has no influential implications on insurance claims payment in Nigeria.

Discussion of Findings

Objective one: Examine the effect of inflation rate on insurance claims settlement in Nigeria.

From the result of regression analysis in table 4.3 inflation rate exerts a positive and non-significant effect on total claims paid by insurance industry in Nigeria with coefficient of (0.116256) and pvalue $0.0655 > 0.05$ significant level. This findings is in line with Okparaka and Makwe (2019) which revealed that inflation rate had a positive but non-significant effect on insurance penetration of the Nigerian insurance industry.

Objective two: Investigate the effect of interest rate on insurance claims settlement in Nigeria.

From the result of regression analysis in table 4.3, interest rate has positive and insignificant effect on total claims paid by insurance industry in Nigeria with coefficient value of (6.24369) and probability value (0.0042) which is < 0.05 significant level. Again in this light, Okparaka and Makwe (2019) indicated that interest rate had a positive and insignificant individual effect on total profit of the Nigerian insurance industry.

Objective three: Investigate the effect of interest rate on insurance claims settlement in Nigeria.

The regression result above in table 4.24 indicates foreign exchange rate has positive and significant effect on total claims paid by insurance industry in Nigeria with coefficient value of (0.274973) and pv

$0.0061 < 0.05$ significant level. This is in line with the findings of Agwuegbo, Adewole and Maduegbuna (2010), Agbamuche (2010), Napier (2015) and Pacine (2017).

Objective four: Determine the effect of poverty rate on insurance claims settlement in Nigeria.

Assess the effect of poverty rate on insurance claims settlement in Nigeria. From the result of regression analysis in table 4.3 poverty rate exerts a positive and non-significant effect on total claims paid by insurance industry with coefficient of (0.23212) and pvalue $0.1061 > 0.05$ significant level. This finding is in line with those of Akutson, Messiah and Yakubu (2018), who found that there was no long-run relationship between unemployment rate and economic growth in Nigeria and that long-run increase in unemployment enhanced economic growth which was statistically significant.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

Based on the analysis on the research work on the effects of selected macroeconomic variables on claims management of insurance industry in Nigeria, it was revealed that:

- (1) Inflation rate ($p=0.0655 > 0.05$) have positive and non considerable implications on total claims paid by insurance industry in Nigeria;
- (2) Interest rate ($p=0.0042 < 0.05$) have positive and sizable influence on total claims paid by insurance industry in Nigeria.
- (3) Foreign exchange rate ($p=0.0061 < 0.05$) have positive and substantial implications on total claims paid by insurance industry in Nigeria
- (4) Poverty rate ($p= 0.1061 > 0.05$) have positive and no influential on total claims paid by insurance industry in Nigeria;

Conclusion

The economic motivation of the study is anchored on the desire to find out the extent of impact which some selected macroeconomic variables affect insurance claims settlement in Nigeria between the periods of 1983 to 2024. The review of conceptual, empirical, and theoretical basis for this study were carried out and knowledge gap developed. Also, the research methodology anchored on the use of the base line OLS regression model.

The analysis of the baseline OLS test reveals that macroeconomic variables positively and significantly impacted on total claims paid by the insurance companies. The selected macroeconomic variables (inflation rate, interest rate, foreign exchange rate, and poverty rate) have positive effects on insurance company's claims settlements in Nigeria. However, inflation rate and poverty rate have non significant effect. Foreign exchange rate and interest rate except for foreign exchange rate had both positive and significant effect on insurance company's claims settlement in Nigeria.

Recommendations

Here are the recommendations of the study

- (1) Insurers should be encouraged to diversify their investment portfolio.
- (2) Government must always make use of its fiscal and monetary policies to maintain a low interest rate to support investors like insurance companies.
- (3) Foreign exchange risk can be mitigated by ceding higher percentage of large risks or risks with high impact to foreign reinsurers.
- (4) One of the cardinal ways to minimize poverty rate is stimulating the economy. Economy with fairly unstable macroeconomic variables can hardly witness economic growth and development that will create employment. Therefore, government should understand this and act promptly by creating a conducive economic environment for small and medium enterprises.

References

- Aboagye, D.C. *et al.* (2022). Understanding qualitative and community indicators of poverty for national health insurance scheme exemptions in Ghana. *Illness Crisis Loss*
- Adam, (2021) What Is the Life-Cycle Hypothesis in Economics? Reviewed by Marguerita Cheng. Retrieved 15/4/2024 from <https://www.investopedia.com/terms/e/expectedutility.asp#>:
- Agbada, A.O. & Osuji C.C. (2020). Fundamental analysis of insurance industry operations and GDP increase in Nigeria. *International Journal of Financial Research*, 11(4), 275-288.
- Agbo, I. U., Okeke, D.C. & Okeume, A. H., (2022). Effect of information provision of cost fire insurance claim on the gross claims of non-life insurance business in Nigeria. *African Journal of Management and Business*, 6(1), 32-52.
- Ariel, G. O., Kadek, S. W., & Sonhaji. (2022), Legal problems on occupational accidents insurance policy for state civil apparatus. *Udayana Master Law Journal*, 11(2), 241-252.
- Cuadros-Meñaca, A. (2020). Remittances, health insurance, and pension contributions: Evidence from Colombia
- Dang, A. *et al.* (2021). Importance of evidence-based health insurance reimbursement and health technology assessment for achieving universal health coverage and improved access to health in India. *Value Health Reg. Issues*

- Fair by Design, (2023.) Insurance and the poverty premium. <https://fairbydesign.com/policy-advocacy/the-poverty-premium-in-insurance/>
- FairByDesign, (2023). The hidden risks of being poor: the poverty premium in insurance a report by the institute and faculty of actuaries and fair by design in September 2021.
- James C. (2021) expected utility: definition, calculation, and examples, reviewed by Thomasbrock. Retrieved 15/4/2024 from <https://www.investopedia.com/terms/e/expectedutility.asp#>:
- Liudmila, T.et al.,(2022). Relationship and mutual influence between poverty and insurance in a developing insurance market, *Journal of Behavioral and Experimental Finance*, Retrieved from <https://doi.org/10.1016/j.jbef.2022.100748>
- Mgbomene, C., & Igben, H. (2023). Effect of interest rates and exchange rate on economic growth of Nigeria. *african journal of social and behavioural sciences*, 13(1). Retrieved from <https://journals.aphriapub.com/index.php/AJSBS/article/view/2022>
- Monday, O. A, & Abbas, U., (2023). Comparison of autoregressive distributed lag model and vector error correction model analysis on the effect of some macroeconomic variables on gdp in Nigeria, *International Journal of Finance Research*
- Offiong, A.I., James G.B., Etim G.S., Enuoh R.O., Bessong P.K., & Omang A.B. (2020). Exchange rate volatility and insurance sector performance in Nigeria: a long-run investigation. *Academy of Accounting and Financial Studies Journal*, 24 (3), 45-56.
- Okparaku, V. C. J. & Makwe, D. M. (2019). Effect of macroeconomic variables on insurance industry growth in Nigeria. *Advance Journal of Management, Accounting and Finance*, 4(2), 2364-4219.
- Stefan, T., (2023). Definition:insurance claims settlement retrieved on 18/11/2023 from <https://www.squareone.ca/resource-centres/insurance-glossary/settlement>.
- Ukangwa, J. U., (2022). Analysis of the Impact of Inflation Rate on Balance of Payments in Nigeria. *7th Annual International Academic Conference on Accounting and Finance Disruptive Technology: Accounting Practices, Financial and Sustainability Reporting*.