

Effect of Macroeconomic Variables on the Purchase of Insurance Policies in Nigeria, 1986 - 2021

Obodo, Chukwuebuka Valentine¹ & Prof. Ifeoma Okwo²

^{1 & 2} *Department of Insurance and Risk Management,
Faculty of Management Sciences,*

Enugu State University of Science and Technology, (ESUT), Enugu

¹ *chukwuebukavalentine84@gmail.com*

Abstract

Research Objectives: The study examined the effect of macroeconomic variables on the purchase of insurance policies in Nigeria. Specifically, the study examined the effect of inflation rate on the purchase of insurance policies in Nigeria; the effect of unemployment rate on the purchase of insurance policies in Nigeria; and the effect of poverty rate on the purchase of insurance policies in Nigeria.

Methodology: The data employed for the study were time series data, and were sourced from CBN statistical bulletin, NAICOM industry report, World Bank indicator and Macrotrend. The Auto regressive Distributed lag model (ARDL) was used in analyzing the data.

Findings: The study found out that: Inflation rate has no significant effect on the purchase of insurance policies in Nigeria; Unemployment rate has no significant effect on the purchase of insurance policies in Nigeria; and Poverty rate has no significant effect on the purchase of insurance policies in Nigeria.

Conclusion: The implication of these findings is that inflation rate, unemployment rate and poverty rate have no significant effect on the purchase of insurance policies in Nigeria.

Recommendation: The study recommends amongst others that there should be diversifying of insurance products to meet the needs of different categories of Nigerians.

Key words: *Macroeconomic variables, Insurance policies, Inflation rate, Unemployment rate, Poverty rate.*

1.0 INTRODUCTION

The insurance industry undoubtedly plays a very crucial role in any growing economy and helps foster development. Insurance in Nigeria can be traced back to the British colonial trading companies that established agency offices in Nigeria on behalf of their parent insurance

companies in the United Kingdom as far back as 1910 (Ibeabuchi et al, 2020). These Insurance companies operated in Nigeria but their profit was adding no value to the Nigerian economy as it was accounted for in their respective parent companies; the ones in Nigeria were subsidiaries of the parent companies. Shortly before Independence, the first Nigeria indigenous Insurance Company was introduced, and more indigenous companies sprung up in the 90s.

Nonetheless, it is worthy to note that before the introduction of this Modern Insurance that requires the payment of a certain sum for covering a risk, there has been some form of traditional insurance already in existence in Nigeria. This traditional Insurance was in the form of mutual and social scheme which evolved over time through the extended family system, age grades, Isusu, akawo and clan union of African cultures etc (Osoka, 1992). This traditional insurance has been a sort of protection and a loss alleviating platform for the old, just as the modern insurance serves us now.

Over time, there have been over 3 recapitalization eras in the Insurance Industry and all these are in a quest to fortify the Insurance Industry. Currently, the insurance industry in Nigeria consists of 12 composite insurance companies, 27 general insurance companies, 14 life insurance companies and 4 Takaful insurance companies (NAICOM, 2022). There are also 3 reinsurance companies whose roles are to provide technical security and capacity for the insurance companies.

Insurance companies like most other companies rely on sales to generate revenue, though insurance sales is quite different as there is no tangible goods/ product to be marketed but a promise; a promise to put the policyholder in the position he/ she was enjoying before an insured loss event occurs which is termed indemnity in Insurance. The promise of Indemnity is the actual sale in Insurance practice and the policyholder has to trust the Insurance company to keep to their promise and this is why insurance is tagged a business of “Uberrimae Fidea (Utmost Goodfaith)”, the parties involved must act in good faith.

Despite the fact that Insurance business in Nigeria is highly regulated and has undergone many recapitalization era’s just like the banking sector and has proven overtime to be paying genuine claims, there are still some macroeconomic variables that affect the purchase of insurance policy in Nigeria. Based on these premises, the study sought to examine the effect of macroeconomic variables on the purchase of insurance policies in Nigeria. Specifically, the study seeks to: examine the effect of inflation rate on the purchase of insurance policies in Nigeria; assess the effect of unemployment rate on the purchase of insurance policies in Nigeria; and evaluate the effect of poverty rate on the purchase of insurance policies in Nigeria.

2.0 REVIEW OF RELATED LITERATURE

Conceptual Review

Macroeconomic variables

Macroeconomics is the study of the economy as a whole. Therefore, macroeconomic variables are those economic indicators signaling the current trends in the economy. Gale (2008) defines macroeconomic variables as economic wide phenomena used to assess the overall performance of an economy, such as unemployment, inflation, economic growth, money supply, budget deficits, and exchange rates etc. They are also the averages or aggregates that cover an entire economy such as national income, national output, total investment, total employment, aggregate supply, aggregate demand, wage level, total consumption and cost structure (Jhingan, 2010). Like all experts, the government, in order to do a good job of macro-managing the economy, must study, analyze, and understand the major variables that determine the current behavior of the macro-economy.

Inflation Rate

Inflation is an increase in the general price level of goods and services in an economy. Inflation is typically a broad measure, such as the overall increase in prices or the increase in the cost of living in a country. The common measure of inflation is the inflation rate, which is the annualized percentage change in a general price index. Inflation rate is the rate of increase in the average price level of all goods and services traded in an economy over any given period of time (Rose & Marquis, 2006). It is the percentage change in the purchasing power of one unit of currency over a certain period of time. Inflation is seen as the third most important macroeconomic concept, which is an increase in the overall level of prices measured by the consumer price index which shows how the value of money changes over time (Gale, 2008). The value of money reduces greatly when the inflation rate is high. Balami (2006), defined inflation as a situation of continuous rise in the general price level of a broad spectrum of goods and services over a long period of time. It is measured as the rate of increase in the general price level over a specific period of time.

Unemployment Rate

Unemployment as defined by the International Labour Organization (2009) is a state of joblessness which occurs when people are without jobs and they have actively sought work within the past four weeks. Unemployment, according to the OECD (Organisation for Economic Co-operation and Development), are people above a specified age (usually 15) not being in paid employment or self-employment but currently available for work during the reference period. Unemployment is measured by the unemployment rate, which is the number of people who are

unemployed as a percentage of the labour force (the total number of people employed added to those unemployed). According to the OECD, Eurostat, and the US Bureau of Labor Statistics, the unemployment rate is the number of unemployed people as a percentage of the labour force. Unemployment as defined by the International Labour Organization (2009) is a state of joblessness which occurs when people are without jobs and they have actively sought work within the past four weeks. Jhingan (2003), defined unemployment as the number of people who are unemployed in an economy, often given as a percentage of the labour force.

Poverty Rate

Poverty can be conceptualized in four ways: lack of access to basic needs/goods; lack of or impaired access to productive resources; inefficient use of common resources and as well as a result of exclusion mechanism (Olayemi, 2012). The inability to maintain a minimal level of living in accordance with one's life narrative is termed poverty (Todaro, 1977). Poverty is a state or condition in which a person or community lacks the financial resources and essentials for a minimum standard of living (Ismail, 2020). Giovanni (2018) believes that poverty is not just a question of income but also of the qualities that a person must possess, one of which is access to education, health, and employment possibilities.

Insurance Premium

An insurance premium is the amount of money an individual or business pays for an insurance policy. Insurance premium is an amount stipulated by the insurer, which individual or organization must periodically pay to hold the actual coverage of insurance. Nzotta (2014) stated that insurance firms attain their funds essentially from premium paid via the insured, against which defined risks are blanketed through them. In other words, insurance corporations assumed the risk of the insured, usually through pooling the risks together in interest for a premium charge. These costs are the pinnacle manner with the resource of the use of which the insured's expectation of indemnity or reimbursement within the event of loss are met (Utomi, 2001).

Theoretical Review

Keynesian theory

The Keynesian theory was propounded in the year 1936 by John Maynard Keynes in his book "The general Theory of employment, Interest and Money". The Keynesians theory believes in the intervention of the government to reach full production. They believe that intervention in the economy by the government through expansionary economic policies will boost investment and promote demand to reach full production. The Keynesian model is based on Aggregate Demand (AD) and Aggregate Supply (AS) curves. In this model AS curve is upward sloping in the short run so that the change in the demand side of the economy affects both price and output.

This theory believes that aggregate demand is influenced by many economic decisions, which unemployment and inflation rate are part of, which means that changes in macroeconomic variables could directly or indirectly affect the demand of a particular service or goods, in our case, the demand of insurance policies.

Empirical Review

Inflation rate on the purchase of insurance policies in Nigeria

Kasidi and Mwakanemela (2013) examined the impact of inflation on economic growth: a case study of Tanzania. The specific objective of the study was to: examine the impact of inflation on economic growth in Tanzania over the period 1990-2011; measure the degree of responsiveness of Tanzanian economic growth (GDP) to changes in the general price levels (Inflation rate); and to establish the relationship between inflation and GDP growth rate in Tanzania. Time series data for the period 1990 -2011 were used to examine the impact of inflation on economic growth. Correlation coefficient and co-integration technique established the relationship between inflation and GDP and Coefficient of elasticity were applied to measure the degree of responsiveness of change in GDP to changes in general price levels. Results suggest that inflation has a negative impact on economic growth. The study also revealed that there was no cointegration between inflation and economic growth during the period of study. No long run relationship between inflation and economic growth in Tanzania.

Celil et al (2016) investigated Inflation and Economic Growth: A Dynamic Panel Threshold Analysis for Turkish Republics in Transition Process through dynamic panel data analysis based on threshold. The study results indicate that there is a nonlinear relationship between inflation and growth rate; the threshold for the influence of inflation on economic growth is 7.97%, and an inflation rate above this threshold has a negative influence on economic growth while an inflation rate below this threshold has a positive influence on economic growth. These results show that a high inflation rate will have a considerable influence on economic growth.

Olugbenga and Oluwabunmi (2020) examined the influence of inflation on the growth prospects of the Nigerian economy, the study employs the autoregressive distributed lag on some selected variables for the period 1980–2018. The finding of the study indicates that inflation and real exchange rate exert a significant negative impact on economic growth, while interest rate and money supply indicate a positive and significant impact on economic growth. The study recommends that a more pragmatic effort is needed by the monetary authorities to target the inflation vigorously to prevent its adverse effect by ensuring a tolerable rate that would stimulate the economic growth of Nigeria.

Basiru (2021) examined the effect of inflation on economic growth in Nigeria for the period of 1973-2019, and the magnitude of relationship among them. Secondary data was used for this study and it was sourced from World Bank development indicators and CBN statistical bulletin. The methods of analysis employed are; multiple linear regression (OLS) and correlation. The tool of analysis used is Stata 14. The findings of the study revealed that INFR has a negative significant effect on LnGDP, while EXR has a positive significant effect on LnGDP. The study suggests that the government should adopt expansionary monetary policy, if it wants to achieve a pre-defined level of economic growth.

Unemployment rate on the purchase of insurance policies in Nigeria

Abdulsalam and Abdullahi (2016) investigated the impact of unemployment and inflation on economic growth in Nigeria (1981 – 2014). The study employed time series data and was analysed using Ordinary Least Square (OLS) technique with various diagnostic tests to determine how fit the data for the analysis are. The results revealed that unemployment and inflation are positively related with economic growth, which means unemployment and inflation does not hinder economic growth. The positive relationship between unemployment, inflation and RGDP indicates that Nigeria RGDP is driven by oil revenue that employs very limited highly skilled labour and the price of output of crude oil is determined externally which may not respond as expected to growth of output in the country.

Eze et al, (2016) studied the Relationship between Unemployment and Economic Growth in Nigeria: Granger Causality Approach. Vector Error Correction Model was used for analysis. The cointegration test result revealed that a long run relationship exists among the variables under study. VECM results showed that unemployment has a negative and significant impact on RGDP. The Granger causality results indicated a unidirectional relationship between UNEMP and RGDP, with causality running from RGDP to UNEMP. The study recommended that the government should as a matter of urgency create more employment opportunities to absorb the teeming population of the unemployed labour force in the country through modernization of the agricultural sector.

Kemi and Dayo (2015) carried out research on the relationship between unemployment rate and economic growth in Nigeria. Error Correction Model (ECM) and Johansen cointegration test were employed to determine both the short run and long run relationships among the variables employed in the study. Empirical findings show that there is both the short and the long run relationship between unemployment rate and output growth in Nigeria. Hence, there is a need to incorporate fiscal measures and increase the attraction of foreign direct investment (FDI) to reduce the high rate of unemployment in the country.

Hjazeen et al (2021) investigated the nexus between economic growth and unemployment in Jordan. The main objective of the study was to investigate the impact of unemployment on Jordan's economy over the period 1991–2019. The study utilized time series data and used the auto-regressive distributed lag (ARDL) model to investigate the relationship between unemployment rate and other variables. ARDL bootstrap cointegration approach was employed to examine the correlation and long-run relationship among the variables. The empirical finding indicated a long-run relationship between the unemployment rate, economic growth, education, female population, and urban population in Jordan. The result shows a negative linkage between economic growth and unemployment, and a positive relationship among the education, female population, urban population and unemployment in Jordan.

Poverty rate on the purchase of insurance policies in Nigeria

Okoroafor and Nwaeze (2013) investigated the impact of poverty on economic growth in Nigeria 1990 – 2011. Data was sourced from secondary sources. The Ordinary Least Squares (OLS) technique was adopted for the study, using a multiple regression model to determine the effect of poverty and discomfort index on the economic growth of Nigeria. Empirical results from the single – equation regression model, though contrary to economic expectations, show a zero–correlation between poverty, discomfort index and economic growth in Nigeria. None of the parameter estimates of Human Development Index (HDI) and Discomfort Index is statistically significant in explaining economic growth in Nigeria. This result is attributable to the poor attitude of the government towards human capital development. This paper recommends, among others, that the government should direct attention towards making human capital development a priority by investing in quality education as well as encouraging entrepreneurship development among Nigerians through small scale business.

Dyah (2021) studied the effect of economic growth and poverty on development disparities in west java province. The data utilized in this study were secondary data from the Central Statistics Agency (BPS) from 2010 to 2019. The descriptive and multiple linear regression analyses were employed in the study. Results showed that the development disparity in West Java was high, as indicated by the economic index growth between partially 0.61 and 0.70 simultaneously. The study found no significant effect on development disparities in West Java; and poverty also partly and simultaneously did not significantly affect development disparities in West Java.

3.0 METHODOLOGY

Research Design

The research made use of *ex-post facto* research design. The *ex-post-facto* research design is described as after-the-fact research. *Ex-post facto* design is a type of research in which data on the selected variables have already been collected by a different entity (Saleh, 2022).

Model Specification

The model used in this study was developed in line with the focus of the objectives of the study. The model seeks to outline a mathematical representation of the extent to which macroeconomic variables influence the purchase of insurance policies. The study adopted the Auto regressive Distributed lag model (ARDL). The model for this work is adopted from the work of Ibeabuchi et al (2020)

$$LNINSP_t = \beta_0 + \beta_1 LNEXR_t + \beta_2 LNINFR_t + \beta_3 LNPVR_t + \beta_3 LNGDP_t + E_t$$

For the purposes of matching the studies hypothesis, the model was rearranged logically and Log transformed to ensure that the variables are Uniform, and was disaggregated thus:

$$LnPREM_t = \beta_0 + \beta_1 LnINFL_t + \beta_2 LnPOV_t + \beta_3 LnUNEMP_t$$

Where:

PREM= Insurance premium, INFL= Inflation rate POV= Poverty rate, UNEMP = Unemployment rate, β_0 = Intercept, $\beta_1, \beta_2, \beta_3$ = the coefficient of the parameter estimates, t = time series data, Ln = Log

4.0 DATA PRESENTATION AND ANALYSIS

Table 4.1 Data on Insurance premium, inflation rate, unemployment rate and poverty rate

YEAR	PREM (Billion)	INFL (%)	UNEMP (%)	POV (%)
1986	263,690,000	5.71715	3.978	93.4
1987	419,960,000	11.2903	3.978	93.4
1988	506,680,000	54.5112	3.978	93.4
1989	701,760,000	50.4667	3.978	93.4
1990	1,048,440,000	7.3644	3.978	93.4
1991	1,334,240,000	13.007	3.978	93.4
1992	2,517,900,000	44.5888	3.931	92.4
1993	5,901,260,000	57.1653	3.982	92.4

EFFECT OF MACROECONOMIC VARIABLES ON THE PURCHASE OF INSURANCE POLICIES IN NIGERIA

1994	14,671,680,000	57.0317	3.97	92.4
1995	14,587,650,000	72.8355	3.945	92.4
1996	13,150,560,000	29.2683	3.898	92.7
1997	16,519,020,000	8.52987	3.9	92.7
1998	17,846,470,000	9.99638	3.893	92.7
1999	14,643,860,000	6.61837	3.901	92.7
2000	22,531,460,000	6.93329	3.852	92.7
2001	28,981,290,000	18.8736	3.838	92.7
2002	37,765,890,000	12.8766	3.751	92.7
2003	43,944,680,000	14.0318	3.812	94
2004	50,495,910,000	14.998	3.789	94
2005	67,746,310,000	17.8635	3.807	94
2006	82,361,890,000	8.22522	3.803	94
2007	105,379,280,000	5.38801	3.791	94
2008	157,206,020,000	11.5811	3.782	94
2009	189,960,450,000	12.555	3.763	94
2010	200,375,980,000	13.7202	3.755	90.8
2011	233,752,880,000	10.84	3.77	90.8
2012	258,402,300,000	12.2178	3.75	90.5
2013	276,529,000,000	8.47583	3.7	90.5
2014	281,701,480,000	8.06249	3.944	90.5
2015	289,341,480,000	9.00939	4.221	89.5
2016	326,114,020,000	15.6753	4.509	89.5
2017	372,358,420,000	16.5235	4.729	89.5
2018	426,210,930,000	12.0947	4.963	90.8
2019	508,230,050,000	11.3968	5.206	90.8
2020	514,587,850,000	13.246	5.999	90.8

2021	616,600,000,000	16.9528	5.936	90.8
------	-----------------	---------	-------	------

Source: CBN Bulletin, NAICOM industry report, World Bank and Macrotrend

From 1986, the total monetary value of insurance policies purchased was ₦263,690,000. In 1990, it had grown to ₦1,048,440,000. There was further growth in volume of sales to the tune of ₦22,531,460,000 by year 2000, and had grown to ₦616,600,000,000 in 2021. Inflation rate was 5.71715% in 1986, 7.3644% in 1990, 6.93329% in 2000 and 16.9528%. The unemployment rate from 3.978% in 1986 was still 3.978% by 1990. It dropped to 3.852% in 2000 and was at 5.936%. The poverty rate was 93.4% in the year 1986, 93.4% in 1990, 92.7% in 2000 and 90.8% in 2021.

Descriptive Statistics

	INFL	POV	PREM	UNEMP
Mean	1.167696	1.965004	10.53716	0.609843
Median	1.104308	1.967080	10.67309	0.592840
Maximum	1.862343	1.973128	11.79000	0.778079
Minimum	0.731428	1.951823	8.421094	0.568202
Std. Dev.	0.302877	0.006934	0.998717	0.052855
Skewness	0.919886	-0.510627	-0.656957	2.124467
Kurtosis	2.932487	1.962806	2.306515	6.555925
Jarque-Bera	5.083974	3.178094	3.310937	46.04706
Probability	0.078710	0.204120	0.191003	0.000000
Sum	42.03705	70.74016	379.3376	21.95434
Sum Sq. Dev.	3.210716	0.001683	34.91025	0.097777
Observations	36	36	36	36

Source: Eviews, 2023

The standard deviation of each variable was lower than their respective means. This shows that they had low volatility. The kurtosis values are all positive suggesting heavy tails.

Unit Root Test

Unit root test was carried out using the Phillips Perron method.

Table 4.2.2 Result of Unit root test

Variable	Phillips-Perron test statistic	Critical value @ 5%	Order of Integration	P-value
INFLATION	-3.720330	-3.544284	1(0)	0.0340
POVERTY	-5.729447	-2.951125	1(1)	0.0000
PREMIUM	-3.722685	-2.951125	1(1)	0.0081
UNEMPLOYMENT	-4.657496	-3.548490	1(1)	0.0037

Source: Eviews, 2023

Table 4.2.2 shows that inflation was stationary at zero level while other variables were stationary at first difference.

Test of Hypotheses

Result of Test of Hypothesis one

Dependent Variable: PREM

Method: ARDL

Date: 04/12/23 Time: 20:32

Sample (adjusted): 2 36

Included observations: 35 after adjustments

Maximum dependent lags: 1 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (1 lag, automatic):

Fixed regressors: INFL C

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
----------	-------------	------------	-------------	--------

PREM(-1)	0.959698	0.016813	57.07910	0.0000
INFL	0.075683	0.055668	1.359559	0.1835
C	0.430221	0.213597	2.014169	0.0525

R-squared	0.991880	Mean dependent var	10.59761
Adjusted R-squared	0.991372	S.D. dependent var	0.944093
			-1.94815
S.E. of regression	0.087692	Akaike info criterion	1
			-1.81483
Sum squared resid	0.246077	Schwarz criterion	6
		Hannan-Quinn	-1.90213
Log likelihood	37.09265	criteria.	1
F-statistic	1954.411	Durbin-Watson stat	1.614800
Prob(F-statistic)	0.000000		

Source: Eviews, 2023

Deriving the estimation equation: $PREM = C(1)*PREM(-1) + C(2)*INFL + C(3)$

Substituting the coefficients into the equation gives:

$$PREM = 0.959697697731*PREM(-1) + 0.075683379739*INFL + 0.430220582484$$

The prediction or estimation equation shows that purchase of insurance policies will increase by 0.959697697731 when premium lag increase by one, will increase by 0.075683379739 when inflation rate increase by one and is predicted to be 0.430220582484 when both premium lag and inflation rate are zero.

Result of Test of Hypothesis two

Dependent Variable: PREM

Method: ARDL

Date: 04/12/23 Time: 20:33

Sample (adjusted): 2 36

Included observations: 35 after adjustments

Maximum dependent lags: 1 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (1 lag, automatic):

Fixed regressors: UNEMP C

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
PREM(-1)	0.947782	0.016914	56.03429	0.0000
UNEMP	0.102223	0.312298	0.327325	0.7456
C	0.582244	0.204853	2.842245	0.0077

R-squared	0.991439	Mean dependent var	10.59761
Adjusted R-squared	0.990904	S.D. dependent var	0.944093
S.E. of regression	0.090039	Akaike info criterion	8
Sum squared resid	0.259423	Schwarz criterion	3
Log likelihood	36.16842	Hannan-Quinn criteria.	-1.84931
F-statistic	1853.047	Durbin-Watson stat	1.406452
Prob(F-statistic)	0.000000		

Source: Eviews, 2023

Deriving the estimation equation: $PREM = C(1)*PREM(-1) + C(2)*UNEMP + C(3)$

Substituting the coefficients into the equation gives:

$$PREM = 0.947782106558*PREM(-1) + 0.102222700226*UNEMP + 0.58224384748$$

The prediction or estimation equation shows that purchase of insurance policies will increase by 0.947782106558 when premium lag increase by one, will increase by 0.102222700226 when unemployment rate increase by one and is predicted to be 0.58224384748 when both premium lag and unemployment rate are zero.

Result of Test of Hypothesis three

Dependent Variable: PREM

Method: ARDL

Date: 04/12/23 Time: 20:33

Sample (adjusted): 2 36

Included observations: 35 after adjustments

Maximum dependent lags: 1 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (1 lag, automatic):

Fixed regressors: POV C

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
PREM(-1)	0.950646	0.019344	49.14491	0.0000
POV	0.175098	2.744805	0.063793	0.9495

C 0.270497 5.515292 0.049045 0.9612

R-squared	0.991412	Mean dependent var	10.59761
Adjusted R-squared	0.990875	S.D. dependent var	0.944093
			-1.89212
S.E. of regression	0.090184	Akaike info criterion	3
			-1.75880
Sum squared resid	0.260258	Schwarz criterion	7
		Hannan-Quinn	-1.84610
Log likelihood	36.11215	criteria.	2
F-statistic	1847.047	Durbin-Watson stat	1.403191
Prob(F-statistic)	0.000000		

Source: Eviews, 2023

Deriving the estimation equation: $PREM = C(1)*PREM(-1) + C(2)*POV + C(3)$

Substituting the coefficients into the equation gives:

$$PREM = 0.950645895049*PREM(-1) + 0.175098345755*POV + 0.270497385244$$

The prediction or estimation equation shows that purchase of insurance policies will increase by 0.950645895049 when premium lag increase by one, will increase by 0.175098345755 when poverty rate increase by one and is predicted to be 0.270497385244 when both premium lag and poverty rate are zero.

5.0 RESULT

Based on the data analyses above, the study found out that: Inflation rate has no significant effect on the purchase of insurance policies in Nigeria; Unemployment rate has no significant effect on the purchase of insurance policies in Nigeria; and Poverty rate has no significant effect on the purchase of insurance policies in Nigeria.

The implication of these findings is that inflation rate, unemployment rate and poverty rate have no significant effect on the purchase of insurance policies in Nigeria.

The study recommends amongst others that there should be diversification of insurance products to meet the needs of different categories of Nigerians.

References

- Abdulsalam, A. S., & Abdullahi, B. (2016). Impact of unemployment and inflation on economic growth in Nigeria (1981-2014). *International Journal of Business and Economic Sciences Applied Research (IJBESAR)*, 9(1), 47-55.
- Balami, D.H., (2006). Macroeconomic theory and practice. *Salawe Prints, Off Leventies, Wulari, Maiduguri.*
- Basiru, H. (2021). Impact of inflation on Nigeria economic growth (1973-2019). *Sokoto State University, Faculty of Arts and Social Sciences, Department of Economics.*
- Celil, A., Ömer, E., & Metin, B. (2016). Inflation and economic growth: A dynamic panel threshold analysis for Turkish republics in the transition process. *Procedia - Social and Behavioral Sciences* 229(196 – 205).
- Dyah, P. E. (2021). Effect of economic growth and poverty on development disparities in West Java Province. *Budapest International Research and Critics Institute-Journal*, 4(2).
- Eze, O. M., Atuma, E., & Egbeoma, N. E. (2016). Relationship between unemployment and economic growth in Nigeria: granger causality approach. *Research Journal of Finance and Accounting* 7 (24).
- Ehiogu, C., Eze, O. & Nwite, S. (2018). Effect of inflation rate on insurance penetration of Nigerian insurance industry. *International Research Journal of Finance and Economics*, 170 (66-76).
- Gale, T. (2008). International encyclopedia of social sciences.
- Hjazeen, H., Seraj, M., & Ozdeser, H. (2021). Nexus between the economic growth and unemployment in Jordan. *Future Business Journal*, 7(1), 42.
- Ibeabuchi, H. I., Nwite, S. C., & Okparaka, V. C. (2020). Effects of macroeconomic variables on the growth of the insurance industry in Nigeria (1981 – 2018). *Academic Journal of Current Research*, 7(3).
- ILO, (2009). International Labour Organization, Labour Statistics Yearbook, Geneva.
- Ismail, et al. (2020). Community perceptions of poverty in Gampong Ayon, Seulimeum sub-district, Aceh besar regency. *Budapest International Research and Critics Institute-Journal*, 270-275.
- Jhingan, M. L. (2003). Advanced macroeconomic theory 11th edition. *Delhi: Vrinda Publications Ltd.*
- Jhingan, M. L (2010). Macro-economic theory (12th). *New Delhi India: Vrinda Publications Ltd.*

- Kasidi, F., & Mwakanemela, K. (2013). Impact of inflation on economic growth: a case study of Tanzania. *Asian Journal of Empirical Research*, 3(4), 363-380.
- Kemi, F. K., & Dayo, B. O. (2015). Unemployment and economic growth in Nigeria. *International Journal of African and Asian Studies*, 11.
- NAICOM (2022). Insurance industry. Retrieved September 7, 2022 from <https://www.naicom.gov.ng/insurance-industries/>
- Nzotta, S. M. (2014). Money, banking and finance. *Owerri Osprey Publishers*.
- Okoroafor, M. O., & Nwaeze, C. (2013). Poverty and economic growth in Nigeria 1990 – 2011. *The MacrotHEME Review, a Multidisciplinary Journal of Global Macro Trends* 2(6).
- Olayemi, J. K. (2012). Survey of approaches to poverty alleviation. *A Paper presented at the NCEMA National Workshop on Integration of Poverty Alleviation Statistics into Plans and Programmes in Nigeria. Ibadan, 27 November – 1st December*.
- Olugbenga, A. A., and Oluwabunmi, D. (2020). Impact of inflation on economic growth: evidence from Nigeria. *Investment Management and Financial Innovations*, 17(2), 1-13.
- Onwuka, C. (2021). Poverty, income inequality and economic growth in Nigeria (1981-2019). *Research Square*.
- Osoka, O (1992). Insurance and Nigeria economy. *Abiola Press Limited, Lagos*.
- Rose, P. S., & Marquis, M. H. (2006) Money and capital market. *New York: McGraw-Hill Irwin*.
- Saleh, Z. (2022). What is an ex post facto design? Retrieved September 7, 2022 from <https://study.com/learn/lesson/ex-post-facto-designs-research-methodology>.
- Todaro, M. P. (1977). Economic development in the third world: an introduction to problems and policies in a global perspective. *Pearson Education*.
- Utomi, P. (2001). Environmental factors and the development of insurance in Nigeria: challenges for the new millennium. *Nigerian Insurance Fact Book, Lagos*.