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CAPITAL MARKET PERFORMANCE AND THE INSURANCE INDUSTRY IN NIGERIA

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Keywords: *Capital Market, Insurance Investment, Government Security, Bonds and Stock.*

Abstract: *The study looked into how the Nigerian insurance industry performed in relation to capital market, specifically how the return on assets of insurance businesses is impacted by government securities, bonds and stocks as investible instruments. But the study used secondary data and then used the ARDL's multiple regression econometric technique. Every test choice was assessed at a five percent significance level, and a range of diagnostic analyses that were judged appropriate for additional reliability were conducted. Our analysis of the short-term ARDL regression result showed that the return on assets of insurance companies was not significantly impacted by the insurance companies' investments in stocks, bonds, and government securities. On the other hand, over time, the return on assets of insurance companies was significantly impacted by the insurance companies' investments in government securities, stocks and bonds. The study suggested that insurance companies in Nigeria should invest in stocks, bonds, and government securities because these investments yield returns on assets over time. Insurance companies should also reduce their level of investment once they have determined that these investments will yield returns on assets over time and also diversify so as not to impair the performance of their business. Finally, insurance companies should seek out other viable sources of investable firms that can yield returns on assets quickly, thereby increasing productivity within the insurance industry and diversifying the economy.*

Introduction

Andabai, (2021). Capital markets are structured financial markets that offer medium and long-term loans for industrial development and modernisation to governments and private investors It also serves as a platform for capital

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providers to conveniently and swiftly recover liquidity. The purpose of capital markets is to raise capital and distribute a country's capital resources among contending uses. It is common knowledge that longstanding finance is essential for investments that spur economic development and growth far lengthier than most investors are ready to commit to (Andabai, 2021). An instrument for investing; as the economy grows, more money is required to keep up with the rapid development (Ehiogu, 2017).

Statement of the Problem

Insurance companies can invest in bonds, debentures, stocks, securities, and derivatives, among other financial instruments, to raise capital for growth or expansion. Capital markets offer a variety of financial instruments designed for investment and raising of funds as equity or expansion of existing business. As a result, the capital market has not been adequately utilised for the expansion of the Nigerian economy or the operation of insurance businesses. Less than 1% of the industry's capital is invested in stocks, bonds, government bonds, real estate, and mortgages, according to (Okparaka, 2018). The Nigerian economy has not grown in a way that fully reflects the segment's investment in the country's capital markets. The empirical literature shows a dearth of interest in the relationship between insurance performance and capital markets. Comparable prior study appears to be concentrated more on capital markets and economic expansion. By analysing the outcome of the capital market on the performance of insurance businesses in Nigeria, this study intends to bridge this gap.

Objectives of the Study

1. To look into how insurance investments in bonds and stocks affect the return on assets of Nigerian insurance firms.
2. To evaluate how insurance investments in government securities affect Nigerian insurance companies' return on assets.

Literature Review

Capital Market

According to (Momoh and Sule, 2009), (Sheffrin and Sullivan, 2003), capital markets are an essential component of the financial system that offer effective supply mechanisms for mobilising, allocating, managing, and distributing long-term funds for investment initiatives, they also act as a vehicle for the efficient.

(Al-Faki, 2006) posits that the capital market comprises a network of specialised financial organizations, as well as a collection of mechanisms, processes, and infrastructures that enable the linkage of medium- and long-term capital suppliers and users in various ways. The two-tier market are the two divisions of the capital market. The New Issue Market is also known as the Primary Market, gives companies and governments a way to raise more capital. The new securities market is the main market, according to (Sweideh, 2005).

Bonds and stocks

Federal government bonds are financial instruments (loans) issued by the financial management office on behalf of the federal

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government of Nigeria, according to (Daniel, 2004). Bond holders are entitled to timely payments of the agreed upon principle and interest from FGN. Purchases of FGN bonds provide funding for FGN for a predetermined amount of time.

The safest investment available in the domestic bond market is FGN bond, which is categorised as a risk-free bond and backed by the federal government's "full credit and security". Since there is no chance of default, interest and principal are guaranteed to be paid on schedule. The primary investors in this kind of product are insurance firms because the income from the securities are tax-free. However, stock is a kind of security that allows investors to own a portion of the business.

The government issues bonds to investors. According to (Shawn, 2021) this is similar to a bond or other obligation that the government issues and guarantees to be repaid when it matures. Government bonds are often regarded as low-risk investments because their security is derived on the government's capacity to raise taxes. Securities are sold by governments to fund expenditures. To benefit from the associated interest, insurance companies purchase or invest in government securities (Shan, 2021).

It is a kind of market in which assets are traded constantly on a daily basis, according to (Pandey, 2006). Securities are traded on a market. It encompasses over-the-counter and stock exchanges where primary market issues are bought and sold in securities. Money markets are locations where short-term capital is raised, according to (Oba, 1999) as a result, a legal body in need of such money establishes a way to raise it.

Government securities

Brigs, (2015) known as development stock or loans, these are securities issued by federal, state, and local governments that are used to finance their internal public debt. In the trading area of the Nigerian Exchange Group, these securities are tradable instruments that are issued at par and repaid at par. The government guarantees and quantifies the two of its interests, income and capital. Government security, also known as security of the government, are bonds or other types of debt that are provided by the administration with a promise to repay upon the security's maturity date

Because of the government's immense taxing power, government securities are frequently thought of as the least expensive investments. They are sold to raise money for government spending, manage deficits, and control the money supply in the economy. Treasury bills, Treasury strips, Treasury notes, Treasury inflation, Treasury bonds, and protection securities are a few types of government securities.

Insurance Investment

Sunny (2014) states that all insurance investments must adhere to a set of rules. While a firm needs to be liquid to retain total security and turn a profit, an investment portfolio does not always need to be safe in order to generate

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higher profits. An investment can be readily spread to other companies, easily turned into cash when needed, and further invested in life insurance to lower mortality. and grow the company. Allocating capital and idle resources to beneficial purposes is known as investing.

Theoretical Framework

The Portfolio Theory by Harry Markowitz's (1952) an American economist, Insurance companies have demonstrated the effectiveness of investing strategies, which typically involve valuing higher investment returns over lower returns and adjusting investment risk in accordance with projected returns. This study is based on this paradigm due to its direct reliance. Utilised for assessing managed portfolio performance, it offers a reliable approximation of an investment's level of risk, which is directly proportional to the magnitude of the anticipated return. As generating returns and ensuring that the investment fund's expected return exceeds the risks involved are the two main objectives of any investment, Markowitz's portfolio theory offers a framework for fulfilling long-term commitments like insurance claims (Omogoke, 2011).

Empirical Review

Ubesie, Nwanekpe, and Ejilibe, (2020) carried out research on the effect of capital markets on Nigeria's monetary expansion. The goal of this paper is to explore how the capital market has affected and been influenced by Nigeria's economic progress over the studied period. Additionally, time series data gathered for research were examined using Ordinary Least Squares (OLS). The results demonstrate that every relevant variable—with the exception of labour force—is important in explaining how the Nigerian capital market has moved towards expansion. Additionally, the outcomes demonstrate that the analysis's model is appropriate and offers the best match for the variables that were collected. The essential suggestions were also made in order to provide governments the ability to create policies that would raise people's standards of life.

Hycenth (2019). The impact of market capitalisation, equity, and industrial lending as capital market indicators on the financing of Nigeria's industrial sector. The CBN's statistical bulletin serves as the secondary source of the data. The statistical technique of multiple regressions using OLS was applied in this study. Our investigation led us to the following conclusions: there is no substantial association between the growth of loans in Nigeria and the industrial sector; there is no substantial association between the growth of Nigerian industry and the industrial sector lending; and there is no substantial association between equity capital and the growth of the industrial sector and lending. The market value should be investigated in order to raise the number of shares and stock prices currently in place, and corporate investments should appropriately monitor the ratios. Lastly, the government ought to appropriately direct the listed firms' operations.

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Okparaka, (2018) carried out research on the influence of insurance investments on Nigeria's capital markets. Its definite aims were to evaluate the power of insurance investments in bonds and stocks and to look into how insurance investments in government securities affected the Nigerian capital markets. The design of the study was postoperative. Regression using ordinary least squares was used as an analytical method. Insurance investments in government securities have a favourable and considerable impact on the assets' market value. Investments in stocks and bonds by insurance companies have a substantial increase in market value. The study concluded that insurance capital market investments as a whole can have a substantial bearing on market value. It was recommended that the insurance industry purchase foreign government bonds and increase its investments in order to diversify its portfolio of government bonds. The insurance sector ought to buy equities and insure them as well. ties. Buying additional futures will earn you this.

Igbodika, Ibenta, and John (2016) looked at how insurance investments affected Nigeria's economic expansion between 1980 and 2014. One measure of economic growth is the GDP. Insurance investment, meanwhile, serves as a gauge for the insurance industry's growth. The CBN, the Statistical Bulletin, and the Insurance Digest of Nigeria provided time series data that were generated in various years for the study. As a result, postmortem examination methodology was used. Using the created ADF and Philippe-Perron approach, data stationarity was established. Long-term effects between variables were established using Johansen's cointegration test.

Egbeonu (2016) looked on the relationships between Nigeria's economic development and insurance investment portfolio flow patterns. Data were taken from World Bank records and CBN statistical bulletins in 2013 for a follow-up study. A variety of econometric techniques, including multiple regression analysis, unit root testing, Engel Granger cointegration, and Granger causality, were employed in the analysis. ..Investment in bonds and securities was positively and significantly correlated with the results for each individual OLS coefficient; however, investment in government securities was significantly correlated negatively. The results of Granger causality demonstrated that the demand-driven link (economic development insurance investment portfolio) describes the pattern of association between the two variables. Thus, we advise bolstering and promoting awareness campaigns within the nation's insurance industry.

Kamio and Njeru (2016) the influence of liquidity risk on the financial performance of 6 insurance businesses registered between 2012 and 2015 on the Nairobi Stock Exchange was scrutinized by Credit, market, and operational risk are among the concerns that have been looked into. The nature of this research was descriptive. Financial performance has been found to be negatively impacted by operational, market, and credit

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risks. According to research, precautions should be made to guard against these dangers and preserve optimal performance. Briggs (2015) conducted empirical study from 1981 to 2011 on the influence of capital markets on the Nigerian economy. The variables for capital market taken into consideration in this research include market capitalisation (MCAP), total new items (TNI), trading volume (VLT), total listed shares, and government shares (LEGS). GDP is used as an indication of economic growth. The Granger causality test and the Johansen cointegration test were applied. The findings showed that the capital market always has a favourable and noticeable influence on the economy and on economic growth.

Osinobi (2001) looks into the association amongst capital markets and economic growth. In this study, data from 1980 to 2000 were analysed using least squares regression. Consequently, a positive correlation was found between economic expansion and the progress of the capital market, indicating the need for policies targeted at accelerating the capital market's development.

Methodology

As a result, the expost facto study design which is advised for time series data is being used. Nigeria is the study's subject area. Nigeria is a federation of 36 independent states and the Federal Capital Territory. Nigeria's insurance firms, and capital market instruments such as bonds, stocks, and government securities were utilized for the study. It is a multi-ethnic and multicultural country. The complete group of insurance businesses registered on the Nigerian exchange group between 1996 and 2022 is the study's target population. Any research project requires intentional and well-planned efforts to obtain relevant data (Nworgu, 2006). The National Insurance Commission and the CBN Statistical Bulletin provided secondary data. Auto Regressive Distribution Lag (ARDL) was used to estimate the postulated association between the bearing of capital market usage and the performance of insurance businesses in Nigeria. The estimation of the model was preceded by the ADF unit root tests. To confirm the dependability of the results, tests such as Jarque-Bera normalcy, Granger causality, and descriptive statistics are used.

Model Specification

Explicitly, this is specified to carry its parameters

$INCROA = f(INISB, INIGS)$ ..... (1)

$INCROA = b_0 + b_1INISB_t + b_2INIGS_t + e$..... (2)

Where:

INCROA = Insurance company's Return on Assets

INISB = Insurance investment in Stocks and Bonds

INIGS = Insurance investment in Government Securities

b_0 = Constant.

B_1, b_2 = Co-efficient

e = Error term

Justification of Variables

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ROA is used as a proxy for insurance company's performance in Nigeria. This data is derived from the CBN statistical annual bulletin, 2022.

Data Analysis

Table 4.1 ADF Test for Stationarity of Data

Variable	Order of integration	Prob-value
Return on Assets	1	0.0399
Investment in stocks and bonds	1	0.0221
Investment in government securities	1	0.0001

Source: Author's compilation 2023

First, all variables were integrated into first order, and then the ADF test was used for additional analysis. since it most closely matches our findings to the different consistency and analytical tests.

Table 4.2 Correlation Analysis

INCROA	INCROA	INIGS	INISB
INIGS	**1**	-0.0340478375926568	-0.2118960672741808
INISB	-0.0340478375926568	1	0.7445232396914303
	-0.2118960672741808	0.7445232396914303	1

Source: Author's compilation 2023

The correlation coefficient value of -0.2118960672741808 supports the finding that there is an adverse association amongst insurance companies' investments in stocks and bonds and their return on assets in Nigeria. The ROA of Nigerian insurance corporations and their investments in government securities results that were similar, albeit with correlation coefficient values of -0.0340478375926568. The correlation result in table 4.2 designates that there is no positive association between the independent and explanatory variables under investigation.

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Table 4.3 Granger Causality

Pairwise Granger Causality Tests
Date: 05/22/23 Time: 21:15
Sample: 1996 2022
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
INIGS1 does not Granger Cause INCROA1	24	1.18474	0.3274
INISB1 does not Granger Cause INCROA1	24	1.11900	0.3472

Source: Author's computation 2023

The Pairwise Granger Causality test also demonstrates that there were no unilateral or bilateral causal connection between the ROA of insurance corporations in Nigeria and the investments made by insurance firms in stocks, bonds, and government securities, in line with our correlation result's lack of a positive relationship. This fit is justified by the probability values of insurance firms' investments in government securities and stocks/bonds to the ROA of insurance corporations in Nigeria, which are 0.3274 and 0.3472, respectively, and which are higher than the 0.05 decision criteria threshold.

Table 4.4 Summary of Descriptive Results

	INCROA	INIGS	INISB
	35.98000	15615.72	152106.4
Median	36.50000	21845.18	232166.8
Maximum	45.45000	29581.43	274246.7
Minimum	24.65000	1546.160	3633.170
Std. Dev.	4.956663	10408.32	111922.2
Skewness	-0.318964	-0.244180	-0.456048
Kurtosis	3.309254	1.291339	1.304961
Jarque-Bera	0.565415	3.552771	4.168211
Probability	0.753740	0.169249	0.124418
Sum	971.4600	421624.4	4106874.
Sum. Sq. Dev.	638.7812	2.82E+09	3.26E+11
Observation	27	27	27

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Source: Author's compilation 2023

Between 1996 and 2022, the insurance industry saw an average return on assets of 35.98%, while the investments of insurance companies in government securities and stocks/bonds were N152106 and N15615, respectively. According to the Skewness values, the investigation shows a high level of negative concentrations. The return on asset's Kurtosis value of 3.30 indicated a normal distribution, but more research will be needed to confirm that the overall Jarqua-Bera finding is free from bias and spuriosity.

Table 4.5 Lag Length Selection Criterion

VAR Lag Order Selection Criteria
Endogenous variables: INCROA INIGS INISB
Exogenous variables: C
Date: 05/22/23 Time: 21:08
Sample: 1996 2022
Included observations: 24

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-562.7607	NA	6.00e+16	47.14672	47.29398	47.18579
1	-543.5406	32.03342*	2.58e+16*	46.29505*	46.88408*	46.45132*
2	-538.9858	6.452724	3.91e+16	46.66548	47.69628	46.93895

Source: Eview Author's computation 2023

The best match for selection at lag 1 among the options in our regression study was the Akaike info criterion (AIC), with an asterisk value of 46.29505, the lowest among the Schwarz criterion (SC) and Hannan-Quinn criterion (HQ). We shall therefore do our hypothesis testing at lag one.

Table 4.6 Regression Result

Dependent Variable: INCROA1
Method: ARDL
Date: 05/22/23 Time: 21:07
Sample (adjusted): 2001 2022
Included observations: 22 after adjustments
Maximum dependent lags: 4 (Automatic selection)

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Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic): INIGS1 INISB1
Fixed regressors: C
Number of models evalulated: 100
Selected Model: ARDL(3, 4, 4)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
INCROA1(-1)	-0.339843	0.133306	-2.549353	0.0342
INCROA1(-2)	-0.182359	0.098332	-1.854529	0.1008
INCROA1(-3)	-0.160636	0.087091	-1.844470	0.1023
INIGS1	0.000197	0.000151	1.302363	0.2290
INIGS1(-1)	0.000151	0.000268	0.565414	0.5873
INIGS1(-2)	0.000433	0.000273	1.587250	0.1511
INIGS1(-3)	0.000651	0.000273	2.387432	0.0440
INIGS1(-4)	0.003308	0.000620	5.334096	0.0007
INISB1	-7.52E-05	3.61E-05	-2.084762	0.0706
INISB1(-1)	-8.60E-05	5.12E-05	-1.681590	0.1312
INISB1(-2)	6.12E-05	5.22E-05	1.172648	0.2747
INISB1(-3)	0.000203	6.58E-05	3.089335	0.0149
INISB1(-4)	-0.000480	0.000104	-4.628294	0.0017
C	-0.484970	0.448276	-1.081856	0.3108

R-squared	0.939904	Mean dependent var	0.104545
Adjusted R-squared	0.842248	S.D. dependent var	3.373583
S.E. of regression	1.339919	Akaike info criterion	3.684221
Sum squared resid	14.36306	Schwarz criterion	4.378521
Log likelihood	-26.52644	Hannan-Quinn criter.	3.847778
F-statistic	9.624660	Durbin-Watson stat	1.851395
Prob(F-statistic)	0.001634		

Source: Eview Author's computation 2023

An increase in insurance businesses' investments in government securities will result in a 0.339843% decline in the returns on the assets of insurance firms in Nigeria between 1996 and 2022, according to the estimated regression result in Table 4.6 above 0.000151 units. According to the coefficient, from 1996 to 2022,

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a reduction of 8 units in insurance investment in stocks and bonds will result in a proportional decline of 0.339843% in the asset returns of insurance firms in Nigeria. As a result, the R-squared indicates that the investments made by insurance companies in government securities and stocks/bonds have a 94% impact on the ROA of insurance corporations in Nigeria. This means that a larger percentage of variations are caused by the independent variable, with the error term accounting for 6% of the variation. However, evaluating our hypotheses at the 0.05 decision level will be the only way to determine the importance of these differences and the impact of insurance firms' investments in government securities and stocks/bonds on the returns on assets of insurance companies in Nigeria. The Durbin-Watson value of 1.851395 indicates that our result does not exhibit auto serial correlation. The statistical significance of the inquiry is also indicated by the Probability (F-statistic) of 0.0001634.

Test of hypotheses

H_{01} The effect of insurance corporations' investments in stock and bond on their ROA in Nigeria.

Conclusion: The regression above shows a 0.1312 probability value of insurance companies' stock and bond investments at lag 1, which is higher than our 0.05 criterion level and indicates that there is no significant impact of insurance companies' stock and bond investments on the ROA of insurance firms in Nigeria.

H_{02}: The ROA of insurance companies in Nigeria is significantly impacted by their investments in government securities. The regression above, which is larger than our 0.05 criterion level, yields a probability value of 0.5873 for insurance companies' investment in government securities at lag 1, indicating that there is no discernible effect of this investment on the ROA of insurance organizations in Nigeria.

In light of this, the ARDL Bound test must be performed in order to determine whether the independent variables have a major impact over the long term, as the short-term ARDL regression result did not reveal any such effect on the ROA of insurance companies.

Table 4.7 ARDL Bound Test

ARDL Bounds Test

Date: 05/22/23 Time: 21:05

Sample: 2001 2022

Included observations: 22

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K

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F-statistic	36.98983	2

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.17	3.19
5%	2.72	3.83
2.5%	3.22	4.5
1%	3.88	5.3

The Source: Eview Author's computation 2023

The null hypothesis that there is no long-term correlation amongst insurance companies' investments in government securities, stock, and bonds and return on assets of insurance firms is rejected based on the F-statistics value of 36.98983 from our ARDL bound test above, which is greater than critical values of 2.72 and 3.83 lower and upper bounds at 5%, respectively. Therefore, over time, the return on assets of insurance businesses is significantly impacted by their investments in government securities, stock, and bonds

Table 4.8 Ramsey RESET Stability Diagnostic Test

Ramsey RESET Test
Equation: UNTITLED
Specification: INCROA1 INCROA1(-1) INCROA1(-2) INCROA1(-3) INIGS1 INIGS1(-1) INIGS1(-2) INIGS1(-3) INIGS1(-4) INISB1 INISB1(-1) INISB1(-2) INISB1(-3) INISB1(-4) C
Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	1.929229	7	0.0950
F-statistic	3.721926	(1, 7)	0.0950

Source: Eview Author's compilation 2023

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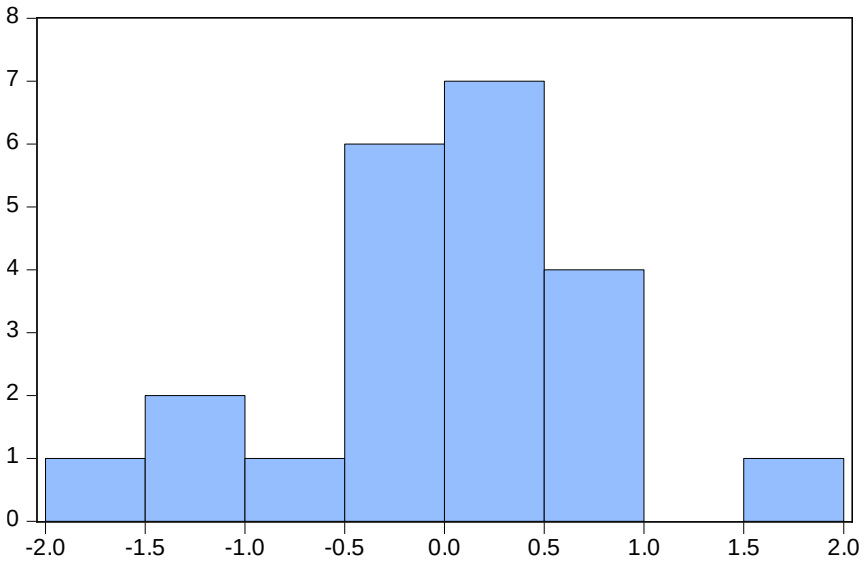
The above-mentioned Ramsey Reset test confirms that our data and outcome are error-free. This fit is justified by the probability values shown in Table 4.8, which are larger than our 0.005 level of criterion.

Figure 4.1 Normality distribution test



Series: Residuals	
Sample 2001 2022	
Observations 22	
Mean	-9.39e-16
Median	0.110180
Maximum	1.845681
Minimum	-1.993948
Std. Dev.	0.827016
Skewness	-0.355883
Kurtosis	3.690963
Jarque-Bera	0.902038
Probability	0.636979

Eview Author's computation 2023

An additional rationale for our findings based on the Jarque-Bera probability value of 0.902038, which is more than the 0.05 level of significance, demonstrates that the data set is biased-free and regularly distributed.

Table 4.9 Breusch-Pagan-Godfrey Residual Diagnostic Result

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.456076	Prob. F (13,8)	0.8997
Obs*R-squared	9.364486	Prob. Chi-Square (13)	0.7449
Scaled explained SS	1.666082	Prob. Chi-Square (13)	0.9999

Source: Eview Author's computation 2023

The probability values of 0.8997 and 0.7449 for corporate debt and government securities,

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respectively, according to the Breusch-Pagan-Godfrey Heteroskedasticity test that was used for the study, indicated that the results were reliable for drawing a final judgment.

Discussion of Results

An increase in insurance businesses' investments in government securities will result in a 0.339843% decline in the returns on the assets of insurance firms in Nigeria between 1996 and 2022, according to the estimated regression result in Table 4.6 above 0.000151 units. According to the coefficient, from 1996 to 2022, a reduction of 8 units in insurance investment in stocks and bonds will result in a proportional decline of 0.339843% in the asset returns of insurance firms in Nigeria. Accordingly, the R-squared shows that the impact of insurance companies' investments in government securities and stocks/bonds on the ROA of insurance establishments in Nigeria is 94%, indicating that the independent variable accounts for a larger percentage of variations, with the error term accounting for 6% of the variation. However, evaluating our hypotheses at the 0.05 decision level will be the only way to determine the importance of these differences and the impact of insurance firms' investments in government securities and stocks/bonds on the returns on assets of insurance companies in Nigeria. The Durbin-Watson value of 1.851395 indicates that our result does not exhibit auto serial correlation. The statistical significance of the inquiry is also indicated by the Probability (F-statistic) of 0.0001634.

The ARDL Bound test was necessary to determine whether the independent variables had a substantial long-term impact on the ROA of insurance companies because the short-term ARDL regression result showed no significant influence of the variables. The null hypothesis that there is no long-term relationship between insurance corporations' investments in government securities, stock, and bonds and ROA of insurance firms is thus rejected based on the F-statistics value of 36.98983 from our ARDL bound test, which is greater than critical values of 2.72 and 3.83 lower and upper bounds at 5%, respectively. Therefore, over time, the ROA of insurance businesses is significantly impacted by their investments in government securities, stock, and bonds.

The Ramsey Reset test was used to confirm our findings and ensure that our data and outcome were error-free. Our data set is normally distributed and free from bias, as demonstrated by the Jarque-Bera probability value of 0.902038, which further supports our result and is more than the 0.05 level of significance. The study's adoption of the Breusch-Pagan-Godfrey Heteroskedasticity test showed that probability values of 0.8997 and 0.7449 for government securities and corporate debt, respectively, making the findings reliable.

Conclusion

The ARDL Bound test was necessary since the short-term ARDL regression result showed no discernible impact of insurance companies' investments in stocks, bonds, and government

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securities on the return of their assets. Consequently, the long-term return on assets of insurance businesses was significantly impacted by the insurance companies' investments in government securities and stocks/bonds.

Recommendations

Nigerian insurance firms should use caution while investing in stocks, bonds and government securities because over time, asset returns are guaranteed.

Insurance businesses should lower their investment levels after learning that investments in stocks, bond and government securities are feasible over the long term in order to avoid negatively impacting the performance of the business and also diversify.

Reference

Adekunle, O. A., Alalade, Y. S. A. & Okulenu, S. A. (2016). Macro-economic variables and its impact on Nigerian capital market growth. *International Journal of Economics and Business Management, 2(2), 22 – 37.*

Agbamuche U. (2012) Investment *of Insurance Fund in the Nigeria Capital Market*: www.dare.uva.nt/document.

Ajie, H. A. & Nenbee, S. G. (2010). An econometric analysis of monetary policy and stock prices in Nigeria: 1986-2008. *International Journal of Economic Development Research and Investment, 1(1), 175 – 192.*

Akingbohungbe, S. S. (1996). The role of the financial system in the development of the Nigerian economy. *Paper Presented at a Workshop Organized by Centre for Africa Law and Development Studies*

Akingunola, R. O., Adekunle, O. A., and Ojodu, H. (2012). Impact of Interest Rate on Capital Market Growth (A Case of Nigeria). *Universal Journal of Management and Social Sciences, 2(11), Retrieved from http://cprenet.com/uploads/archive/UJMSS_*12-1213.pdf.

Al-faki, M. (2006). *The Nigerian capital market and socio-economic development. Faculty of social science public lecture, University of Benin. 9-16*

Aliyu, S. (2009). Stock prices and exchange rate interactions in Nigeria: An intra-global financial crisis maiden investigation.*Munich Personal RePEc Archive (MPRA) 13283. Retrieved from* http://mpra.ub.uni-muenchen.de/id/eprint/13283

Alile, H. and Anao, A. (1990). The impact of capital market on economic growth: the Nigerian perspectives, *international journal of development and sustainability*,3, 4

British International Journal of Applied Economics, Finance and Accounting
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Advance Scholars Publication
Published by International Institute of Advance Scholars Development
https://aspjournals.org/Journals/index.php/bijaefa

Aliyu, S. U. R. (2010). Does inflation has an Impact on stock returns and volatility? Evidence from Nigeria and Ghana. *Munich Personal RePEc Archive (MPRA) Paper No. 30091. Retrieved from https://mpra.ub.uni-muenchen. de/30091/1/MPRA_paper_30091.pdf.*

Ananwude, A. C., Echekoba, F. N., Okaro, C. S., & Akuesodo, O. E. (2017). Monetary Policy and Capital Market Performance: *An empirical Evidence from Nigerian Data Research Journal of Economics, 1(3), 1-5. https://nbnresolving.org/urn:nbn:de:0 168-ssoar-56320-3*

Andabai, P.W, (2021). Financial intermediation institutions and markets*, Kelrich educational publishers, Yenagoa Bayelsa state Nigeria, 08063181196*

Agarwal, S. (2001). Stock market development and economic growth*: preliminary evidence from African countries, journal of sustainable development in Africa.*

Adewoyin, (2004). of stock market performance on industrial productivity of Nigeria: An empirical analysis*, Research Journal of Business and Economic Management, 2(1), 1- Article Number: 3E30D3E81*

Babalola, A. (1987): *The Role of Accountability and Profitability in Insurance.* McGraw Hill Book London, United Kingdom.

Barakat, M. R., Elgazzar, H. S. & Hanafy, K. M. (2016). Impact of Macroeconomic Variables on Stock Markets: Evidence from Emerging Markets. *International Journal of Economics and Finance, 8(1), 195 – 207.*

Bissoon, R., Seetanah, B., Bhattu-Babajee, R., Gopy-Ramdhany, N. and Seetah, K. (2016). Monetary policy impact on stock return: Evidence from growing stock markets. *Theoretical Economics Letters, 6, 186-1195.*

Brigs A. P. (2015). Capital market and economic growth of Nigeria, *research journal of finance and accounting, 6, 9*

Catalan, M., Imparido, G. & Muselem, A. R. (2000). Contractual Savings or Stock markets development: which leads*? Policy research paper. 2421, World Bank, Washington. Economic Statistics. 14, 10 –* 38.

Daniel. M. (2004). Doing Quantitative Research in Education with SPSS, *publisher, Sage publications Ltd,*

Ekezie (2015). The impact of capital market and economic growth in Nigeria, *research of public policy and administration. 3, 9*

British International Journal of Applied Economics, Finance and Accounting
B. J. Int. J. A. Econ. Fin. & Acc.
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Advance Scholars Publication
Published by International Institute of Advance Scholars Development
https://aspjournals.org/Journals/index.php/bijaefa

Eze, S. O. (2018). The effect of monetary policy on stock market performance in Nigeria. *Journal of Economic Literature Classification,* (45), 1-33.

Fama, E. F. (1981). Stock returns, real activity, inflation and money. *American Economic Review, 71(4), 545-565.*

Folawewo, A.O. & Osinubi, T.S. (2006). Monetary policy and macroeconomic instability in Nigeria: A rational expectation approach. *Journal of Social Sciences, 12(2), 93- 100.*

Gugler K. (2003). The effect of mergers: an international comparison*, international journal of industrial organization,21,5, 625-6*

Haise P. & Sumeg K (2008). The relationship between insurance and economic growth in Europe. A Theoretical and empirical analysis. *Empirical Journal, 35 (4)*

Harold D. S. and Jean W.K. (2007). Risk management and insurance: perspectives in a global economy*, Asia- Pacific journal of risk and insurance https://doi.org/10.2202/2153-37.1024*

Kurawa, J. M. and Dandago, K. I (2009). Empirical Examination of Quality Financial Reporting Practice by Nigerian Money Deposit Banks, *Triumph publishing company Ltd Kan*

Kamau, F and Njeru, A (2016). Effect of mergers on financial performance of firms listed at the Nairobi Security Exchange. *International Journal Of Science and research 5,5(10), 867-872*

Masha S. N, Essien M. L., Musa D., Akpan B. & Abeng M. O. (2004). Theoretical issues in financial intermediation, financial markets, macroeconomic management and monetary policy. *In Nnanna, O. J., Englama A. and Odoko, F. O. (eds), Financial Markets in Nigeria. Central Bank of Nigeria Publication, 7-27*

Mortimer, R (2012) Monetary Policy Explained. Economic Basics, December 30. Retrieved 29th *November 2016 from http://romeconomics.com/monetary-policyexplained/*

Namini TN, Nasab ZT (2015) the impact of monetary and fiscal policies on Iran's stock market: An SVAR approach. *Journal of Applied Environmental Biological Sciences,* (5), 767-775.

Nwankwo, G.O. (1991). Money and capital market in Nigeria. *University of Lagos Press, Lagos.*

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Advance Scholars Publication
Published by International Institute of Advance Scholars Development
https://aspjournals.org/Journals/index.php/bijaefa

Nworgu, B.G. (2006). Educational Research: Basic Issues and Methodology. *University trust publishers, Nsukka*

Oba, Ekiran, (1999). Basic understanding of capital market operations, *Lagos Deacon Oba Ekira*

Olowe, RA. (1997). Financial management: concepts, analysis and capital investment. *LagoLagos: brierly Jones Nigeria ltd*

Osmond N.O, Hycenth O.O and Emmanuel I. A, (2014). Stock market performance and economic growth in Nigeria*: an empirical appraisal, 6, 26, 2014 33 stock*

Okparaka C. (2018). Impact of insurance investments on Nigerian capital market, *international journal of advanced research in management and social sciences impact factor: 7.065, 7, 8*

Oke, M.O. (2012). Insurance sector development and economic growth in Negeria. *African journal of business management, 6, 7016-7023*

Pandy IM, (2006). Finacial management concept*, Mombai Vikas publishing house pvt ltd*

Panjer, H.H. (2001). Financial economics. *Illinois: the actuarial foundation*

Sunny C. Nwite (2004). Elemnet of insurance*, Immaculate publishers, #2 Aku Street, Ogui*

New layout, Enugu 042-254433; Fax: +23442254433

Soyede, A (2005). The role of capital market in economic development*, Sur, Mark J (6) 6-14*

Sohail (2011). Insurance market activity and economic growth: evidence from Nigeria *international journal of finance and economics 80:66-74htt://www.researchgate.net/science-contributions/Z-Hussain 2091898372.*