

RISK RETENTION STRATEGY AND FINANCIAL PERFORMANCE OF SELECTED INSURANCE COMPANIES IN NIGERIA

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ABSTRACT

Insurers manage their risk exposures to maximise profit, improve their underwriting performance and maximise return on assets and shareholders' funds by retaining a certain proportion of accepted risks. This study used a panel data analysis to examine the relationship between risk retention as a risk financing strategy and the profitability of life insurance firms. This study aims to determine the relationship between the Risk Retention Ratio and the profitability of life insurance companies in Nigeria. An ex-post facto research design was adopted, and cross-sectional data was obtained from eight life insurance companies. Descriptive analysis and inferential statistics were used to test the suitability of the data for the study. Data are further subjected to the fixed effect and random effect regressions. Hausman test was conducted, and the null hypothesis of a random effect model was rejected. The results revealed that the Risk Retention Ratio has a highly positive but insignificant impact on profitability. This implies that factors other than the risk financing strategy adopted by life insurers in Nigeria impact profitability. It is recommended that life insurers should increase the uptake of life insurance and reduce operating expenses, and the government should enforce relevant laws on the purchase of life insurance to increase the income generated by insurers and, by extension, their profitability.

Keywords: Risk-retention, Risk-finance, Life-insurance, Financial-Performance, Profitability, Nigeria.

1. INTRODUCTION

Insurers protect individuals and businesses from experiencing hardship caused by an unexpected loss of properties or premature death through the transfer of risk from the insured to the insurer who agrees to compensate the insured for a specified uncertain event which could adversely affect the insured (Fadun & Silwimba, 2023; Dorfman, 2009). This risk absorption role of insurers promotes stability in the financial markets and also provides a “sense of peace” to economic entities (Fadun & Oluwaleye, 2023; Fadun, 2021; Akotey, Sackey, Amoah and Manso, 2013). Insurers, as risk managers who absorb the risk of others, must manage their risks to enhance resilience and profitability (Fadun, 2018).

Profitability increases insurers' solvency conditions and ensures that policyholders and shareholders continue supplying funds to insurance companies (Hasibuan, Sadalia, & Muda, 2020). Like other businesses, insurers are exposed to risks that can hinder their profitability. Insurers adopt various measures to manage the risks which can hinder their profitability. The process by which insurers identify, assess, control and treat risks to mitigate them is called risk management. One of the ways by which risks can be managed is to finance it. This means deciding when, how and who will bear the cost of risk before it materialises (Dorfman 2009).

One of the measures taken by insurers to manage their risk exposure so as to maximise profit, improve underwriting performance and maximise return on assets and shareholders' funds is by retaining a certain portion of the risks accepted (Fadun & Osasona, 2024a; Oladunni & Okonkwo, 2022). Aside from being a risk management strategy, risk retention is a requirement for reinsurance as reinsurers require insurers to retain a portion of the risk portfolio before accepting cession (Fadun, Aduloju & Oluwaleye, 2023; Mutengaa & Staikouras, 2007). Setting the right risk retention level is important and requires specific technical and risk management skills (Oladunni & Okonkwo, 2022). Retention level is an indicator of an insurer's preferred

risk financing strategy. A high retention level indicates that an insurer prefers to retain more than to cede to the reinsurer. A low retention level shows that retention is not the insurer's preferred strategy. Insurers set retention levels based on the total volume of business, insurance premium income for each insurance class, results equalisation, the amount of capital available and capital adequacy, return on capital, the probability of a loss event considering the structure of the insurance company's portfolio, the amount of loss and the organisational policy of the insurance company (Kramaic & Fran, 2013).

Life insurers in Nigeria have consistently maintained high retention ratios compared to their non-life counterparts (NAICOM 2019, Obalola & Mfon 2022). Nigerian life insurers recorded a retention ratio of 92 per cent against 62 per cent in the non-life sector in 2015; between 2016 and 2018, the retention ratio was between 91 per cent and 94 per cent, with 91 per cent in 2019. This was against the 56 per cent retention rate recorded by the non-life sector in 2019 (NAICOM 2019, Obalola & Mfon 2022). This shows that Nigerian life insurers retain more risk than they transfer to reinsurance.

Several scholars like Lee & Lee (2012) and Lee (2014), Marijana, Maja, and Kramarić (2014), Cummins, Dionne, Gagné, & Noura (2021) and Abass and Ojikutu (2019) have argued that reinsurance is expensive and have led to a reduction in the profitability of insurers.

In light of this, the study considered retention as an alternative to reinsurance and to determine the relationship between retention ratio and profit after tax of life insurers in Nigeria.

The hypothesis for the study is:

H₁: There exists a significant relationship between risk retention ratio and profit after tax of life insurers in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Risk financing.

risk financing is an aspect of risk treatment concerned with the measures and methods taken by entities to finance the cost of risks and uncertainties Young (2022). Risk financing determines when and by whom the costs of losses are borne (Dorfman, 2009). Risk financing methods were traditionally classified into risk retention and risk transfer. However, revolutionary changes over the past 40 years have expanded risk financing methods beyond these two alternatives Young (2022). Mutengaa & Staikouras (2007) classified risk financing into three methods: retention-based, reinsurance-based and capital-based. The risk financing method an insurer adopts depends on the goal the insurer wants to achieve (Mutengaa & Staikouras, 2007) and the tax, legal, and regulatory implications of adopting such a technique (Young 2022).

2.1.2 Retention as a Risk Financing Technique

Chartered Insurance Institute of Nigeria (2000) defined insurers' retention as the limit of liability which insurers retain for their net account after ceding to reinsurance. Retention is essential in any risk-taking situation and a requirement by reinsurers for insurers to retain a portion of the risk portfolio before participation (Mutengaa & Staikouras, 2007). The level of insurers' retention is measured by the retention ratio, which is a reflection of the insurer's ability to manage their business risks (Hasibuan, Sadalia, & Muda, 2020). As suggested by Hasibuan et al., (2020), the retention limit should be based on a risk and loss profile made in an orderly, relevant, and accurate manner.

According to Mutengaa & Staikouras (2007), retention can be used as a risk financing technique when three conditions are fulfilled. The first is that losses should be highly

predictable, second, the worst-case scenario is of low severity and lastly, it is the most effective treatment available. Retention can be beneficial if used optimally. Retention is helpful in assessing catastrophic protection and its impact on the rating. Retention is a disciplinary measure, required by those providing risk capital on higher layers, to ensure prudent management of loss portfolio. Retention endorses the concept of value-added by retaining cash flows, it signals the ability and/or level and/or suitability of capital to sponsor liabilities carried forward to settlement date and it contributes to the cost determination, as it is easier and cheaper to finance it (Mutengaa & Staikouras, 2007).

2.1.3 Risk Retention Ratio

The risk retention ratio is the proportion of the accepted risks borne by the insurer, and it measures the risk-bearing capacity of an insurance company before ceding a part or all of the risks to a reinsurance company (Usman, Fadun & Aduloju, 2024; Oladunni & Okonkwo, 2022). Soye, Olumide, and Adeyemo, 2022 asserted that the risk retention ratio is one of the significant indicators of the risk underwriting efficiency of insurers and a determinant of financial strength. This ratio reveals the amount of risk businesses the primary insurer ceded to the reinsurance companies, indicating the primary insurers' financial strength.

Rudden (2023) describes the risk retention ratio as the portion of risk kept on an insurance company's books rather than being passed on to reinsurance companies. Citing OECD, Rudden (2023) stated that the average retention rate for non-life insurance was 84.8 per cent and the Netherlands was the OECD country with the highest reinsurance retention rate for non-life insurance in 2021.

2.1.4 Profitability

Maximising owners' wealth measures the performance of insurance firms, and profitability is the main determinant of whether the owners' wealth is maximised (Abdeljawad, Dwaikat &

Oweidat, 2022; Fadun, 2018). Enhancing profits, in general, enables the firm to maintain its continuity and survival. Profitability increases insurers' solvency and is crucial to insurance companies shareholders (Fadun, Aduloju & Oluwaleye, 2023; Hasibuan, Sadalia & Muda, 2020).

Soye et al. (2022) posit that profitability is one of the major goals of insurance companies by maximizing the wealth of their investors and an important factor in determining the sustainability of insurance companies as the insuring public will enquire about the profit of insurance companies purposely to conclude whether or not the company will be able to meet their financial obligations in the future. Also, the shareholders are inquisitive about understanding the position of their investments. It is safe to say that insurance companies' survival depends on their profitability. Insurance companies profit by prudently managing accepted risks through reinsurance: retention and ceding percentage options (Fadun, Aduloju & Oluwaleye, 2023; Oladunni & Okonkwo, 2022).

Profitability is often used to gauge the performance of insurance firms because it is correlated with elements including the capital structure, loss ratio, company size, investment ratio, increase in written insurance premiums, management effectiveness and asset quality (Aduloju & Akindipe, 2022).

2.1.5 Life Insurance Companies in Nigeria

Life insurance companies are insurance firms providing coverage for risks in the areas of individual life insurance coverage, group life insurance and annuity with coverage ranging from term assurance, whole life assurance and endowment policies. Life insurance plays an important role in economic growth as it provides long-term funds for investment and increased economic activities (Fadun & Osasona, 2024b; Fadun & Oluwaleye, 2023). The life insurance premium of the Nigerian insurance sector has increased significantly. In 2012 premium income

of the sector grew by 28.25%, 14.94% in 2013, 35.02% in 2014, 23.48% in 2015, -0.50 in 2016, 15.53% in 2017, 10.6% in 2018, 29.2% in 2019 but the sector experienced a 4.4% decline in 2020 and a 17.5% growth in 2021 (Nigerian Insurers Association, 2024).

The growth experienced by the life insurance sector is attributed to the growth in the annuity arm of the sector (Obalola & Ukpong, 2022). The growth experienced by this sector is attributed to a rise in the number of newly retired persons recently exposed to annuity plans, company-friendly regulations (Soye & Adeyemo, 2017), consistent rules by NAICOM, awareness of the life business and increasing industry confidence and sector's recapitalisation has also stimulated the industry's growth (Obalola & Ukpong, 2022). Life insurance influences insurance penetration (Fadun & Osasona, 2024b). Moreover, life insurance claim settlement plays a vital role in insurance penetration (Fadun & Osasona, 2024a), promoting economic growth (Fadun, 2023).

2.2 Theoretical Review

2.2.1 Decision-making theory (DMT)

The Decision-Making Theory was propounded by renowned economist Herbert A. Simon in 1947. DMT is concerned with decision-making under uncertainty. The theory suggests that decision-making means the adoption and application of rational choice for the management of a private, business, or governmental organisation in an efficient manner. The theorist argued that making a decision is choosing between alternative courses of action. It can even mean choosing between action and non-action. At the core of the theory lies 'satisficing', which is a combination of satisfying and sufficing (Alijoyo, 2021). It suggests that one should pursue objectives or make decisions that involve minimum risks and complications instead of focusing on maximizing profits. In contrast to classical theorists, Simon suggests that there is never one

best course of action or decision. This is due to the inability to have complete information, thereby limiting decision-making.

2.2.2 Implication to the Study

Insurers decide to either cede to a reinsurer or retain to manage the risks they are exposed to to maximise their profit. Whichever way, there are risks associated with both reinsurance and retention. There is a possibility that the risk ceded to reinsurance may not materialise, and the insurer would have lost part of its premium to the reinsurer (Fadun, Aduloju & Oluwaleye, 2023). It is possible that the loss arising from a risk event could exceed the insurer's retention, which could lead to the payment of loss that exceeds their retention, resulting in an underwriting loss (Usman, Fadun & Aduloju, 2024). In choosing between alternative courses of action (reinsurance and retention), insurers should make decisions involving minimum risks and complications instead of maximising profits (Usman, Fadun & Aduloju, 2024; Fadun, Aduloju & Oluwaleye, 2023).

2.3 Empirical review

Salaudeen, Salam and Mudashiru (2021) examined the impact of the Net Claim ratio and Net Retention ratio on the financial performance of insurance businesses in Nigeria. The study adopted the Correlation research design and secondary data obtained from the annual reports of listed insurance companies in Nigeria with ten insurance companies which were randomly selected. The results revealed that Net Claim ratio and Net Retention ratio have an insignificant impact on the financial performance of insurance businesses in Nigeria. The study consequently recommended that rather than see reinsurance as a cost centre, insurance executives should view it as an important risk management mechanism.

Soye and Adeyemo (2017) evaluated the effect of reinsurance mechanisms on insurance companies' sustainability in Nigeria. Using expo-facto research design and inferential

statistical analysis; the study tested the sign of the significant relationship between the dependent variable (profitability (ROA)) and the set of independent variables (Net Retention ratio, Net Claim ratio, Net Commission ratio, and Ratio of Ceded Reinsurance). The study used secondary data found in the financial reports of the insurance companies considered, covering a period from 2009 to 2015. Linear regression analysis was used to determine how much the independent variable impacted the set of dependent Variables. Correlation was used to find out whether the relationship among the variables to be measured was significant or not. The study results reveal that the Net Retention ratio, Net Claim ratio, Net Commission ratio, and Ratio of Ceded Reinsurance are correlated with insurance profitability (ROA) and administrative expenses. The study recommends that Insurance companies have optimal retention levels in their risk diversification management to ensure favourable financial performance.

Soye, Olumide, and Adeyemo (2022) studied reinsurance as a risk management instrument and its effect on the non-life insurance firms' profitability in Nigeria, using an ex-post-facto design, with multiple correlation and regression model to analyse the data obtained from the Nigerian Insurers Association Digest report 2007 to 2018, which is indicating 12 years of study. The findings of the study show that Premium Cession Ratio (PCR) and Net Retention Ratio (NRR) have a positive but insignificant effect on the profitability (ROA) of insurance companies

Hasibuan, Sadalia, and Muda (2020) using secondary data from 9 Indonesian insurance companies conducted a study on the Effect of Claim Ratio, Operational Ratio and Retention Ratio on the Profitability Performance of Insurance Firms in the Indonesia Stock Exchange. The outcomes of the study showed that Claim ratio and operating expense ratio have negative and significant effects on profitability while retention ratio has a positive but insignificant effect on profitability. Claim ratio, operational expense ratio and retention ratio together have a significant effect on firms' profitability.

3. METHODS

The Research design adopted by this study is the ex-post facto research design which is used for after-event research. It allows for the collection of already existing data. The research approach for the study is purely quantitative and data is panel data which is a combination of both time series and cross-sectional data.

The Secondary data used for the study were extracted from the Nigerian Insurers Association (NIA) Digest and annual financial reports of selected life insurance companies for eleven years covering from 2011 to 2021.

The study population comprised all life insurance firms transacting business in Nigeria. According to NAICOM (2023), there are 13 life insurance firms in Nigeria. Hence, the population of this study comprised the 13 life insurance companies.

The study adopted the purposive sampling technique to select the appropriate sample size based on two criteria: The first criterion is the company's existence through the study period (2011-2021), and the second criterion is the availability of required data. Eight (8) life insurance firms that met these criteria were duly selected as sample size for the study. The companies are African Alliance Insurance Company Ltd, Capital Express Assurance Limited, Coronation Life Assurance Limited (formerly Wapic Life Insurance), Custodian Life Assurance Limited (formerly Crusader Life), Sanlam Life Insurance Nigeria Limited (formerly FBN Life), Mutual Benefits Life Assurance Ltd, Royal Exchange Prudential Life Plc. and Prudential Zenith Assurance Company Limited (formerly Zenith Life).

3.1 Model and Data

$$y = a + bx_{it} + e$$

3.1.1 Model Calibration

Where: Y = dependent variable represented by Profit after Tax (PAT).

α = Constant

X = Independent variable represented by Risk Retention Ratio (RRR)

b = Regression coefficient of each independent variable.

e = Error term

t = time

i = company

3.1.2 Operationalization of variables

The variables used for this study relate to the risk retention of life insurance firms in Nigeria and their profitability within the study period. The notations of these variables are presented in Table 1.

Table 1: Dependent and independent Variables

VN	Variables	Definition	Variable	Measurement	Source
Y	PAT	Profit After Tax	Dependent	profit after tax of selected life insurers	NIA Digest
b ₁	RRR	Risk Retention Ratio	Independent	The total amount of premium retained by the selected life insurers	NIA Digest

Source: Researchers Computation, 2024

3.1.3 Data presentation and analysis

Data analysis for this study was conducted using the E-views 12 software. The statistical analysis used consisted of descriptive analysis to examine the features of the extracted data, preliminary investigations to determine the appropriateness of the data used and to select the most appropriate panel data regression model, and inferential analysis through the use of regression analysis to test the hypothesis of the study. Table 2 shows the descriptive statistics.

Table 2: Analysis Results

STATS	PAT in millions	RRR
Mean	810.1729	0.889659
Median	106.9100	0.930000
Maximum	7947.291	1.000000
Minimum	0.000000	0.000000
Std. Dev.	1540.431	0.130326
Skewness	2.957393	-3.892377
Kurtosis	12.05419	25.81049
Jarque-Bera	428.8645	2130.043
Probability	0.000000	0.000000
Observations	88	88

Source: Researchers' Computation using Eviews 12

Table 2 indicates that the mean for PAT and RRR are 810.1729 and 0.889659 respectively. The standard deviation values for PAT and RRR are 1540.431 and 0.130326 respectively with PAT having the highest standard deviation value of 1540.431. The maximum values of the data set are 7947.291 and 1.000000 while the minimum values are 0.000000 and 0.000000. PAT has the highest value while both PAT and RRR have the same lowest values. PAT is positively skewed with a value of 2.957393 while RRR is negatively skewed with a value of -3.892377. The kurtosis values of the data set are 12.05419 and 25.81049 respectively. This shows that both PAT and RRR are leptokurtic. The Jarque-Bera probability of 0.000000 which is less than 0.05 for PAT and RRR reveals that the distribution is not normally distributed. This could be attributed to the high disparity of variations from the sample mean in the raw data.

4.2 Regression Analysis

The three most adopted regression models for panel data analysis (fixed effect, random effect method, pooled OLS) were employed to examine the causal link between the dependent and independent variables. In case the fixed and random effects do not provide significant details, pooled OLS estimation was also done. The researcher first contrasted the random effects with the alternative, the fixed effect, to determine the difference between fixed and random effects. Table 3 provides a summary of the model selection criteria.

Table 3: The model selection criteria

Hypothesis		Decision
Chow test	$H_0: (p > 0.05)$	Choose the common effect
	$H_1: (p < 0.05)$	Choose fixed effect
Hausman Test	$H_0: (p > 0.05)$	Choose random effect
	$H_1: (p < 0.05)$	Choose fixed effect
Lagrange Multiplier test	$H_0: (p > 0.05)$	Choose the common effect
	$H_1: (p < 0.05)$	Choose random effect

Source: Researchers' Compilations

3.1.3.2 Chow Test

The Chow test was conducted to determine which model best fits the data out of the fixed and common effects. It operates on the theory that one of the models is inconsistent with the data. Its null hypothesis is that the preferred model is the common effect. Thus, a p-value of less than 0.05 would lead to rejecting the null hypothesis. The Chow test for this analysis is presented in Table 4 below.

Table 4: Correlated Random Effects -Chow Test

Redundant fixed effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects test	Statistic	d.f.	Prob.
Cross-section F	4.192988	(7,79)	0.0006
Cross-section Chi-square	27.801605	7	0.0002

Source: Field Survey, 2024

The result shows a p-value of 0.0006, which is less than 0.05. Hence, the null hypothesis was rejected and concluded that the fixed effects model best fits our panel data regression analysis. This conclusion is strengthened because the fixed effect model has removed omitted variable bias by measuring changes within the profitability and risk retention ratio across time. Additionally, as a more conservative model, the fixed effect model provides consistent estimation results and does not require distributional assumptions or an absence of omitted variables for consistency.

3.1.3.3 Hausman test

The Hausman test is carried out to select which model best fits the data out of the fixed and random effects. It operates on the theory that one of the models is inconsistent with the data. Its null hypothesis is that the preferred model is the random effect. Thus, a p-value of less than 0.05 would lead to rejecting the null hypothesis. The Hausman test for this analysis is presented in Table 5.

Table 5: Hausman Test

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.930787	1	0.3347

Source: Field Survey, 2024

With a p-value of 0.3347 greater than 0.05, the null hypothesis was rejected and concluded that the random effects model is better for our panel data regression analysis. However, the study adopted the fixed effect model because the prob (F-statistic) of the random effect model is 0.5227, which is greater than 0.05, showing that the random effect model is ineffective for the data. Additionally, as a more conservative model, the fixed effect model provides consistent estimation results and does not require distributional assumptions or an absence of omitted variables for consistency.

Table 6: Common effects model regression

Dependent Variable: PAT
 Method: Panel Least Squares
 Date: 02/20/24 Time: 15:21
 Sample: 2011 2021
 Periods included: 11
 Cross-sections included: 8
 Total panel (balanced) observations: 88

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RRR	1560.520	1263.405	1.235170	0.2201
C	-578.1578	1135.860	-0.509004	0.6121
R-squared	0.017431	Mean dependent var		810.1729
Adjusted R-squared	0.006006	S.D. dependent var		1540.431
S.E. of regression	1535.798	Akaike info criterion		17.53395
Sum squared resid	2.03E+08	Schwarz criterion		17.59026
Log likelihood	-769.4939	Hannan-Quinn criter.		17.55664
F-statistic	1.525645	Durbin-Watson stat		1.040470
Prob(F-statistic)	0.220131			

Source: Field Survey, 2024

Table 7: Fixed Effect Panel Data Regression

Dependent Variable: PAT
 Method: Panel Least Squares
 Date: 02/20/24 Time: 15:18
 Sample: 2011 2021
 Periods included: 11
 Cross-sections included: 8
 Total panel (balanced) observations: 88

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RRR	494.9520	1266.055	0.390941	0.6969
C	369.8343	1135.761	0.325627	0.7456
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.283597	Mean dependent var	810.1729	
Adjusted R-squared	0.211049	S.D. dependent var	1540.431	
S.E. of regression	1368.255	Akaike info criterion	17.37712	
Sum squared resid	1.48E+08	Schwarz criterion	17.63048	
Log likelihood	-755.5931	Hannan-Quinn criter.	17.47919	
F-statistic	3.909133	Durbin-Watson stat	1.440303	
Prob(F-statistic)	0.000625			

Source: Field Survey, 2024

Table 8: Random effect panel regression

Dependent Variable: PAT

Method: Panel EGLS (Cross-section random effects)

Date: 02/20/24 Time: 15:22

Sample: 2011 2021

Periods included: 11

Cross-sections included: 8

Total panel (balanced) observations: 88

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RRR	788.4253	1228.968	0.641534	0.5229
C	108.7431	1134.693	0.095835	0.9239
Effects Specification				
			S.D.	Rho
Cross-section random			752.6597	0.2323
Idiosyncratic random			1368.255	0.7677
Weighted Statistics				
R-squared	0.004767	Mean dependent var	389.4092	
Adjusted R-squared	-0.006806	S.D. dependent var	1363.074	
S.E. of regression	1367.704	Sum squared resid	1.61E+08	
F-statistic	0.411898	Durbin-Watson stat	1.317461	
Prob(F-statistic)	0.522715			
Unweighted Statistics				
R-squared	0.013164	Mean dependent var	810.1729	
Sum squared resid	2.04E+08	Durbin-Watson stat	1.040332	

Source: Field Survey, 2024

The outcomes of the three most used panel regression models were compared. The fixed effect model was compared with the common Effects model and the result revealed that the fixed effect model is the best fit. This is because the p-value for the Chow test is less than 0.05 and the prob (F-statistic) of the common effect regression is 0.220131, which is greater than 0.05 shows that the common effect model is not the best fit for the study. The fixed effect model was also compared with the random effects model. The results of the Hausman test showed a p-value that is greater than 0.05. However, the study adopted the fixed effect model because the prob (F-statistic) of the random effect model is 0.5227 which is greater than 0.05 and suggests that the random effect model is not an effective model for the data.

The results of the selected fixed effect model show that Risk Retention Ratio (RRR) with a coefficient of 494.9520 and a p-value of $0.6969 > 0.05$ has a very high positive but statistically insignificant effect on Profit after Tax (PAT).

The coefficient of determination (R^2) stat of 0.2835 indicates that 28.3% of the life insurance companies' profitability can be predicted by the Risk Retention Ratio (RRR). The adjusted R^2 measures how well the regression model explains the variations in the dependent variable. An adjusted R^2 of 21.1% indicates that the changes in the independent variables explain the 21.1% change in PAT, while the remaining 78.9% change can be explained by other factors not included in the model. The F-statistic computes the standard F-test of the joint hypothesis that all the coefficients except the intercept equal zero. The F-stat probability displays the p-value corresponding to the observed F-statistic. In the fixed panel data regression, an F-Stat Probability of 0.000625 adds to the credence of the model that the fixed effect model is significant and the model has a good fit. The individual fixed effects capture the measurement error associated with the proxy used for the dependent variable. Focusing on the within individual variation as against the between-individual variation overcomes this error and reduces the potential source of bias.

3.1.3.4 Test of Hypothesis

Table 4.4: Test of Hypothesis

Hypothesis	Probability	Result	Decision
There is a significant relationship between the risk retention ratio and profit after tax of life insurance companies in Nigeria.	$P = 0.6969 > 0.05$	Risk retention ratio has a very high positive but statistically insignificant effect on profit after tax	Reject H_1

Source: Authors computation using E-views 12

4. RESULTS

This examined the relationship between risk retention as a risk financing strategy and the performance of life insurance firms in Nigeria. The study results showed that risk retention as a risk financing strategy has a high positive but statistically insignificant relationship with the profitability of life insurance companies in Nigeria.

This result is consistent with Salaudeen, Salam, and Mudashiru's (2021) findings, which showed that the retention ratio has an insignificant impact on the financial performance of insurance firms in Nigeria. It is also consistent with the results of Soye and Adeyemo (2017) and Hasibuan, Sadalia, and Muda (2020), who found that the retention ratio has a positive but statistically insignificant impact on profitability.

Furthermore, this study reveals that the Risk Retention Ratio has a highly positive but insignificant impact on profitability. This implies that factors other than the risk financing strategy adopted by life insurers in Nigeria impact profitability. In addition, the results indicate that the profitability of life insurance firms in Nigeria is influenced by factors other than the risk financing strategy adopted by life insurers.

5. CONCLUSION

This study aimed to determine the relationship between risk retention as a risk financing strategy and the profitability of life insurance firms in Nigeria. The result revealed that retention has a high positive and insignificant effect on the profitability of life insurance firms in Nigeria. Based on the result of this study, the following recommendations are proposed

- i. Life insurers should create several life insurance products targeted at different members of the society to increase patronage. This will help to increase insurance penetration in

Nigeria, generate more income, increase the predictability of claims and increase profitability

- ii. Secondly, life insurers should strive to reduce operation costs to improve their profitability
- iii. The government should enact new laws and enforce existing laws that can increase the uptake of life insurance policies in Nigeria. This will help to ensure the growth and profitability of life insurers in Nigeria.

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