IMPACTS OF REINSURANCE ON LIFE INSURANCE BUSINESSES' PROFITABILITY: THE NIGERIAN EXPERIENCE

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ABSTRACT

This research explored the impact of reinsurance on the profitability of life insurance firm's in Nigeria. Most of the existing studies focused on how reinsurance impact the profit after tax of non-life insurers, hence the study set to establish the dimension of relationship that exist between the reinsurance and the profitability of life insurers. The ex-post facto research design was used, using cross-sectional data from eight life insurers that met the selection criteria from 2011-2021. Data were analysed with panel regression using the fixed effect and random effect regressions on e-views 12. Hausman and Chow tests were carried out to select the best-fit model for the data. The outcome of the analysis showed that the reinsurance premium ceded has an insignificant impact on the profit after tax of life insurance businesses in Nigeria. This provides evidence that the profitability of life insurers in Nigeria is determined by factors other than the reinsurance cession. This could be because life insurers retain more than they cede to reinsurers. The study thereafter recommended that life insurers should nonetheless cede more to reinsurance as a way of diversifying their risk portfolio and increasing protection against catastrophic losses that could exceed their retention.

Keywords: *life insurers, Insurance, Profitability, Nigeria, reinsurance.*

1.0 INTRODUCTION

Profitability is one of the major reasons for the establishment of a business. In addition to increasing insurers' solvency conditions, profitability plays a significant role in determining policyholders' and shareholders' willingness to provide funds for insurance companies (Hasibuan, Sadalia, & Muda, 2020). Insurers like other businesses face various risks which can hinder their profitability. In a bid to be profitable, Insurers adopt various risk management measures to mitigate 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 simply means deciding when, how and who will bear the cost of risk before it materialises (Dorfman 2009).

Insurers are shock absorbers which help to protect families and businesses from experiencing hardship caused by an unexpected loss of properties or premature death of a family's bread-winner through the transfer of risk from an insured to an insurer who agrees to compensate the insured for a specific uncertain event which could adversely affect the insured (Dorfman, 2009). The insurance industry absorbs risks from businesses and people who wish to limit the risk of loss of assets or life. This risk absorption role played by insurers encourages financial market stability and also provides a "sense of peace" to economic entities (Akotey, Sackey, Amoah and Manso, 2013, Camino-Mogro and Bermúdez-Barrezueta, 2019).

Given the importance of insurers as risk managers who absorb the risk of others to promote stability in the economy, insurers' risk needs to be managed to avoid the collapse of the economy. As a way of managing risk, insurers cede to reinsurance to cover some of the accepted risks (Soye, Olumide, & Adeyemo, 2022). The ceding insurer pays premium to the reinsurer, which in consideration agrees to compensate the insurer against the reinsured losses (Lei, 2019). Reinsurance lessens the insurers risk of becoming insolvent by stabilising loss experience, expanding insurers' capacity, and reducing liability on certain types of risks and/or guarding against catastrophes (Cummins, Dionne, Gagné, & Nouira, 2021).

Reinsurance is a beneficial risk financing strategy for insurers because it increases their capacity, improves technical expertise, allocates risk and limits financial distress (Lloyds 2019). Reinsurance is a requirement for life insurers who are looking to control the risks accepted and manage solid capital as ceding to reinsurance can help to reduce underwriting risk and improve underwriting capacity, achieve prudent solvency ratio and valuable service provision among other benefits (Park, 2020).

Reinsurance offers a range of benefits to the insurance industry which is a crucial sector of the economy. However, despite the benefits provided by reinsurance to insurers scholars such as Lee & Lee, (2012) and Lee, (2014) have maintained that despite that reinsurance increases the capacity of insurers, it increases their cost thereby reducing their profitability. Similarly, Marijana, Maja, and Kramarić, (2014) stated that profitable insurers demand less reinsurance compared to less profitable counterparts since they can absorb large unforeseen losses and face financial pressures. Other scholars like Cummins, Dionne, Gagné, and Nouira, (2021) also argued that reinsurance is expensive and the reinsurance cost can be considerably more than the actuarial price of the transferred risk.

Most of the studies on reinsurance and the performance of insurers focused on non-life insurers creating an empirical gap as regards the implications of reinsurance on life insurers' performance. Hence, this study attempts to fill the gap and also contribute to

the literature by analysing the impacts of reinsurance on the profitability of life insurance firms, using selected life insurance companies in Nigeria as a case study.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Risk financing.

Young (2022) describes risk financing as a major aspect of risk treatment which encompasses the systems and plans put in place to offset the cost of risks and uncertainties. Risk financing determines when and by whom the costs of losses are borne (Dorfman 2009). Traditionally, the methods of risk financing were classified into risk retention and transfer (Dorfman, 1987 cited by Young 2022) however there have been revolutionary changes over the past 40 years which have expanded risk financing beyond these two alternatives. Even Dorfman who gave two alternatives in 1987 suggested four alternatives in 2009. Mutengaa and Staikouras (2007) classified risk financing techniques into three categories; retention-based, reinsurance-based and capital-based. Popescu, Iacob, and Dabija (2020) opined that risk financing costs for insurers are lower than those of other organisations because the reserves set up for the payment of claims by organisations that are not insurance/reinsurance companies are considered non-deductible expenses. The additional costs are compensation for services that, in the absence of the transfer, the transferring organization must do alone. The risk financing method adopted by an insurer is dependent 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 Reinsurance as a risk financing strategy

Reinsurance Association of America (2013) defined Reinsurance as a contract of insurance whereby for a share of the premium, an insurer referred to as a reinsurer or assuming company agrees, to compensate another insurer referred to as a reinsured or cedant for claims paid by the cedant under insurance policies issued by the cedant to its policyholders. The traditional reinsurance policies could take the form of proportional risk cession consisting of facultative, quota share, and surplus share; and non-proportional cession which consists of: facultative, per risk, catastrophe, and aggregate excess of loss (Mutengaa & Staikouras, 2007). Reinsurance serves as a risk management instrument that safeguards cedants' Shareholders' funds against catastrophic losses that could ruin the shareholders' investments (Soye et al 2022). Reinsurance can effectively manage the risks of insurance businesses by mitigating against bankruptcy risk, increasing risk assumption capacity, reducing business risks and the fluctuation of the financial report, to stabilize insurers' solvency (Soye et al 2022).

Cummins, Dionne, Gagné, and Nouira (2021) maintained that the reinsurance price which insurers pay exceeds the actuarial cost of the risk ceded, however, reinsurance could still be profitable for primary insurers if the benefits derived from ceding exceed the costs expended. Reinsurance lessens insurers' risk of becoming insolvent through stabilisation of loss experience, capacity expansion, and reduction of liability on specific risks and catastrophe protection. In addition, ceding to reinsurance reduces agency costs and incentive conflict that could arise between various stakeholders (Cummins et al, 2021).

2.1.3 Profitability

Insurers' performance is assessed by the extent to which owners' wealth is maximized and profitability is a primary measure of how well the owners' wealth is fully optimized (Abdeljawad, Dwaikat, & Oweidat, 2022). The profits enhancement helps firms to maintain continuity and survival. For insurers, Profitability does not only increase the solvency conditions it also goes a long way in determining policyholders' and shareholders' willingness to invest funds in insurance businesses (Hasibuan, Sadalia, & Muda, 2020).

Soye et al (2022) posit that profitability is one of the fundamental reasons for the existence of insurance businesses through investors' wealth maximization and an important element in determining the sustainability of insurers as the insuring public is interested in the profit of insurance businesses to determine the ability of the firm to fulfil future financial obligations. Similarly, shareholders are interested in the profitability of insurers to understand the position of their investments. It is safe to say that insurance companies' survival depends on their profitability. Insurance companies actively seek to optimize profit by cautiously managing accepted risks through optimal use of retention and ceding percentage options (Oladunni & Okonkwo, 2022).

Profitability is commonly used to measure insurance firms' performance because it is connected to the capital structure, loss ratio, company size, investment ratio, increase in written insurance premiums, management effectiveness and asset quality (Aduloju & Akindipe, 2022).

2.1.4 Life Insurance Companies in Nigeria

Life insurance firms are insurance businesses providing coverage for individual life insurance coverage, group life and annuities with coverage ranging from term assurance, whole life assurance and endowment policies. The Nigerian life insurance industry is set

on a path of growth as indicated by the premium income generated by the sector. 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).

The growth experienced by the life sector is credited to a growth in the annuity arm of the sector (Obalola & Ukpong, 2022). The increase in the number of new retirees recently introduced to annuity plans and company-friendly regulations contributed to the growth experienced by this sector (Soye & Adeyemo, 2017), consistent rules by NAICOM, awareness of the life business and growing industry confidence and sector's recapitalization also contributed the growth of the sector (Obalola & Ukpong, 2022).

Empirical Review

Kramaic and Fran (2013) studied the impact of insurance premiums ceded to reinsurance on profitability of Austrian, Croatian and Romanian insurers, for five years and found that in Croatia, insurers with a higher risk cession to reinsurance have lower profitability while insurers with a higher cession of premiums to reinsurance in Austria reported higher profitability. However, in Romania, the effect of reinsurance on insurance businesses' profitability appeared to be insignificant.

Cummins, Dionne, Gagné, and Nouira (2021) studied the benefits and cost of reinsurance in the US using a sample size of 554 firms from 1995 through 2003. The results showed that reinsurance considerably raises the costs of providing insurance services and significantly cuts the unpredictability of the loss ratio. The study shows that insurers can use alternative reinsurance measures which are cheaper than reinsurance and that insurers ceding to reinsurance choose to reduce their underwriting risk by paying higher costs for the production of insurance services.

Aduloju and Ajemunigbohun (2017) investigated the connection between cedants' gross premium income, underwriting profit and financial stability. Primary and secondary data were used for the study. Using a structured questionnaire returned by two hundred and forty-six respondents from the selected insurance businesses provided primary data. The ratios of Reinsurance Recoverable to Policyholders Surplus (RRRPHS), Return on Asset (ROA), Return on Equity (ROE), and Reinsurance Ceded Ratio (RCR) were calculated using secondary data from the published financial reports of chosen ten insurers from 2014 and 2015. A descriptive research design and purposive sampling technique were used. The results revealed that reinsurance cession significantly raises the cedants' premium income. Furthermore, the results proved that changes in reinsurance utilisation positively correlate with and impact insurers' profitability. The study established that

reinsurance cession diminishes insurers' insolvency risk through loss experience stabilisation and capacity expansion.

Soye and Adeyemo (2017) studied reinsurance mechanism and its implications on the sustainability of insurance businesses in Nigeria. The research adopted an expo-facto design to test the connection between profitability (ROA) and Net Retention Ratio, Net Claim Ratio, Net Commission Ratio and Ratio of Ceded Reinsurance. The study covered seven years between 2009 and 2015. The type of the relationship between profitability (ROA) and the aforementioned variables was tested with regression analysis. The result proved that Net Retention Ratio, Net Claim Ratio and Ratio of ceded Reinsurance are positively related with profitability (ROA) while Net Commission Ratio is negatively related with profitability (ROA).

Soye, Olumide, and Adeyemo (2022) studied how reinsurance as an instrument for managing risks affects the profitability of general insurance businesses in Nigeria using data from 2007 to 2018 gathered from the Nigeria Insurance Association Digest. The study adopted profitability (ROA) as the dependent variable and Premium Cession Ratio (PCR) and Net Retention Ratio (NRR) Reinsurance Dependence Cede Premium (RDC) and Reinsurance Commission to Shareholder's Equity (RCS) as independent variables. Multiple regression and correlation analysis was conducted and the research outcomes revealed that Premium Cession Ratio (PCR) has a positive but insignificant effect on profitability, Net Retention Ratio (NRR) does not affect profitability, Reinsurance Dependence Cede Premium (RDC) has no significant impact on profitability and Reinsurance Commission to Shareholder's Equity (RCS) also has no significant impact on profitability.

Hypothesis Formulation

Following the review of the literature, the hypothesis for this study is stated below:

H_1: A significant relationship exists between reinsurance premiums ceded and the profit after tax of life insurance businesses in Nigeria.

3. METHODS

The ex-post facto research design, commonly used for after-event research was adopted by this study. This design allows for the collection of existing data. The research method adopted is quantitative using panel data which is a blend of time series and cross-sectional data. The Secondary data for the study were extracted from the Nigerian Insurers Association (NIA) Digest and annual financial reports of selected life insurers for eleven years covering from 2011 to 2021. The study population comprised all life

insurers operating in Nigeria. According to NAICOM (2023), there are 13 life insurance firms in Nigeria. Hence all 13 firms make up the population of this study

The study adopted the purposive sampling technique to select the appropriate sample size based on two criteria: The first criterion is the life insurers' existence through the study period (2011-2021) and the second criterion is the availability of required data. Eight (8) life insurance firms that met the criteria were duly selected for the study. The selected life insurers 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 (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 (RPC)
b = The independent variable's regression coefficient.
e = Error term
t = time
i = company

3.1.2 Operationalization of variables

Variables relating to reinsurance transactions of life insurance businesses in Nigeria and their profitability for the period being studied were considered for the study. The notations of these variables are in the table below.

Table 1: Dependent and independent Variables

VN	Variables	Definition	Variable type	Measurement	Source
Y	PAT	Profit After Tax	Dependent	profit after tax of selected life insurers	NIA Digest
b_1	RPC	Reinsurance Premium Ceded	Independent	Total amount of premium ceded by life insurers in Nigeria	NIA Digest

Source: Authors Computation, 2024

3.1.3 Data Analysis and Interpretation

Data was analysed 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 confirm the appropriateness of the data used and to ensure the appropriateness of the panel data regression model, and inferential analysis through regression analysis conducted to test the hypothesis of the study.

Table 2: Descriptive statistics

STATS	PAT	RPC
Mean	810.1729	471.8608
Median	106.9100	326.3700
Maximum	7947.291	2517.091
Minimum	0.000000	0.000000
Std. Dev.	1540.431	470.6546
Skewness	2.957393	1.532225
Kurtosis	12.05419	5.932387
Jarque-Bera	428.8645	65.96240
Probability	0.000000	0.000000
Observations	88	88

Source: Eviews 12 Output (Computed by the Author)

Table 2 shows that the mean for PAT and RPC are 810.1729, and 471.8608 respectively. The standard deviation values for PAT and RPC are 1540.431, and 470.6546 respectively with PAT having the highest standard deviation value of 1540.431. The maximum values for PAT and RPC are 7947.291 and 2517.091 while the minimum values are 0.000000 and 0.000000 PAT has the highest value while PAT and RPC both have the lowest values. PAT and RPC are positively skewed with values of 2.957393 and 1.532225 skewed. The kurtosis values of the data set are 12.05419, and 5.932387 respectively. This shows that PAT and RPC are leptokurtic. The Jarque-Bera probability of 0.000000 which is less than 0.05 for PAT, RPC and RRR shows that the distribution is not normally distributed. This could be ascribed to the high disparity of variations from the sample mean in the raw data.

(i) Regression analysis

In contrast to the common regression, panel data regression has to go through the detailed estimation modelling procedure which is to select the most appropriate model out of the three approaches of estimating panel data regression model. The three approaches are Pooled (common) OLS regression, fixed effects model, and random effects model.
To select the most suitable out of these three models, this study will conduct the three tests. The model selection criteria are given in table (3) below:

Table 3: The model selection criteria

Test	Hypothesis	Decision
Chow test:	H_0: [p greater than 0.05] H_1: [p less than 0.05]	Choose common effect Choose fixed effect
Hausman Test	H_0: [p greater than 0.05] H_1: [p less than 0.05]	Choose random effect Choose fixed effect
Lagrange Multiplier test	H_0: [p greater than 0.05] H_1: [p less than 0.05]	Choose common effect Choose random effect

Source: author's compilation 2024

(ii) Chow Test

Typically, the Chow test determines which model between fixed and common effects best fits a given data set. It is predicated on the idea that one of the models isn't appropriate for the given collection of facts. The ideal model is the common effect, according to the Chow test's null hypothesis. It is therefore advised that the null hypothesis be rejected if the p-value is less than 0.05. Table 4 below shows the results of the Chow test for this investigation.

Table 4: Correlated Random Effects -Chow Test

Effects test	Statistics	d.f	Prob
Cross section F	6.156970	(7,79)	0.0000
Cross section Chi-square	38.313671	7	0.0000

Source: Authors computation using E-views 12

With a p-value of 0.0000<0.05, the alternative hypothesis that the fixed effects model is best fit for the regression analysis is accepted and the null hypothesis is rejected. The fixed effect model's capacity to eliminate bias from missing variables by analysing changes in reinsurance premium and profitability over time supports this choice.

Additionally, the more conservative fixed effect model yields dependable estimation findings and is not dependent on distributional assumptions or the lack of missing variables.

(iii) Hausman test

Hausman test is carried out to determine whether the fixed or random effects models is best fit for the data set. It is based on the presumption that either of the two models is not suitable for the given data set. The ideal model, according to its null hypothesis, is the random effect. Therefore, if the p-value is less than 0.05, the alternative hypothesis should be accepted and the null hypothesis should be rejected. Table 5 displays the results of the Hausman test for this research.

Table 5: Hausman Test

Correlated Random Effects - Hausman Test			
Summary	Chi-Sq. Statistics	Chi-Sq. d.f	Prob
Cross-section random	1.835485	1	0.1755

Source: Authors computation using E-views 12

Since p-value is 0.1755 which is higher than 0.05, we therefore accept the null hypothesis that the random effects model is the best fit for the data set. Furthermore, the random effects model yields considerably broader confidence intervals since it assumes a distinct underlying effect for each research and considers this as an extra source of variance.

Table 6: POOLED OLS REGRESSION

Dependent Variable: PAT
Method: Panel Least Squares
Date: 02/14/24 Time: 11:32
Sample: 2011 2021
Periods included: 11
Cross-sections included: 8
Total panel (balanced) observations: 88

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RPC	0.537269	0.303828	1.768334	0.0806
C	3.777503	5.843932	0.646397	0.5197

R-squared	0.035085	Mean dependent var	13.97352
Adjusted R-squared	0.023865	S.D. dependent var	9.037885
S.E. of regression	8.929389	Akaike info criterion	7.239038
Sum squared resid	6857.123	Schwarz criterion	7.295341
Log likelihood	-316.5177	Hannan-Quinn criter.	7.261721
F-statistic	3.127007	Durbin-Watson stat	1.155382
Prob(F-statistic)	0.080551		

Source: Authors computation using E-views 12

Table 7: Fixed Effect Panel Data Regression

Dependent Variable: PAT
Method: Panel Least Squares
Sample: 2011-2021
Total panel(balanced) observations: 88

Variable	Coefficient	Std. Error	t.Statistic	Prob.
RPC	0.191664	0.279866	0.684841	0.4954
C	10.33623	5.370893	1.924490	0.0579
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.375683	Mean dependent var	13.97352	
Adjusted R-squared	0,312462	SD dependent var	9.037885	
S.E. of regression	7.94028	Akaike info criterion	6.962746	
Sum squared resid	4436.676	Schwarz criterion	7.216110	
Log likelihood	-297.3608	Hannan-Quinn criter	7.064820	
F-statistic	5.942296	Durbin-Watson stat	1.797335	
Prob(F-statistic)	0.000006			

Source: Authors computation using E-views 12

Table 8: Random effect panel data regression

Dependent Variable: PAT
Method: Panel EGLS (Cross-section random effects)
Sample: 2011-2021
Total panel(balanced) observations: 88
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t.Statistic	Prob.
RPC	0.262328	0.274962	0.954052	0.3427
C	8.995186	5.554986	1.619300	0.1090
Effects Specification				
	S.D			Rho
Cross-section random	4.891762			0.2988
Idiosyncratic random	7.494028			0.7012
Weighted Statistics				
R-squared	0.010373		Mean dependent var	5.859563
Adjusted R-squared	-0.001134		SD dependent var	7.526076
S.E. of regression	7.530342		Sum squared resid	4876.720
F-statistic	0.901458		Durbin-Watson stat	1.628412
Prob(F-statistic)	0.345051			
Unweighted Statistics				
R-squared	0.025897		Mean dependent var	13.97352
Sum squared resid	6922.416		Durbin-Watson stat	1.147188

Source: Authors computation using E-views 12

Three popular panel regression models' results were compared. The random effect model is the best fit for this study as suggested by the Hausman test which showed a p-value of 0.1755 which is larger than 0.05. The result of the random effect model shows that, Reinsurance Premium Ceded (RPC), with a coefficient of 0.262328, a p-value of 0.3427 which is greater than 0.05, has a very low positive and statistically insignificant impact on profit after tax (PAT),

The coefficient of determination (R^2) of 0.010373 points out that reinsurance premium ceded can predict 1.03% of the profitability of life insurance businesses. The adjusted R^2 measures the extent to which the dependent variables' variations are explained by the regression model. An adjusted R^2 of -0.001134 shows that the changes in the RPC are responsible for the -1.13% change in PAT while other factors not included in the model are responsible for the remaining variations. The F-stat probability displays the p-value that corresponds to the observed F-statistic. An F-Stat Probability (p-value) of 0.345051 in a random effects model indicates that the observed F-statistic is not statistically significant. It implies that the variation explained by the random effects is relatively

small compared to the residual error. This means that there is no strong evidence to suggest that the random effects are contributing significantly to the model. Therefore, the variability attributed to the random effects might not be substantially different from the residual variability, indicating that the random effects might not be adding significant explanatory power to the model.

The results of the fixed effect model on the other hand showed that, Reinsurance Premium Ceded (RPC), with a coefficient of 0.191664, a p-value of 0.4954 which is greater than 0.05, has a very low positive and statistically insignificant impact on profit after tax (PAT).

The coefficient of determination (R^2) of 0.375683 points out that reinsurance premium ceded can predict 37.6% of the profitability of life insurance businesses. The adjusted R^2 measures the extent to which the profit after tax (PAT)s' variations are explained by the regression model. An adjusted R^2 of 0.312462 shows that the changes in reinsurance premium ceded are responsible for the 31.2% change in profit after tax while other factors not included in the study are responsible for the remaining 68.8% variation. The F-stat probability displays the p-value that corresponds to the observed F-statistic. In a fixed effect regression, an F-Stat Probability of 0.000006 increases the model's credibility. Indicating that the fixed effects model is significant and ideal for the study even though the Hausman test suggests otherwise. The individual fixed effects capture the measurement error linked with the proxy used for the dependent variable. This error is overcome and the potential source of bias is reduced by concentrating on the within-individual variation rather than the between-individual variation.

Interestingly, the result of the pooled OLS regression model which was rejected by the chow test showed that there is moderately positive and statistically significant relationship between reinsurance premium ceded and profit after tax of life insurers with a coefficient of 0.537269 and a p-value of 0.0808. Furthermore, the coefficient of determination (R^2) of 0.03508 points out that reinsurance premium ceded can predict 3.5% of the profitability of life insurance businesses. An adjusted R^2 of 0.023865 shows that the changes in reinsurance premium ceded are responsible for the 2.4% change in profit after tax. An F-Stat Probability of (p-value) of 0.080551 in a pooled OLS regression model indicates that the observed F-statistic is statistically significant. Lastly since the result showed that reinsurance can predict 3.5% of life insurer's profitability, we conclude that reinsurance premium ceded has an insignificant impact on profit after tax of life insurers.

(iv) Hypothesis Test

Table 4.4: Test of Hypothesis

Hypothesis	Probability	Result	Decision
A significant relationship exists between reinsurance premiums ceded and the profit after tax of life insurance businesses in Nigeria.	P= 0.4954 > 0.05	A low positive but insignificant relationship exists between Reinsurance premium ceded and profit after tax	Reject H_1

Source: Authors computation using E-views 12

4.0 RESULTS AND DISCUSSIONS

This study studied the impact of reinsurance as a risk financing strategy on Life Insurance Businesses' Profitability in Nigeria. The study showed that the relationship between reinsurance premium ceded and the profitability (measured by profit after tax) of life insurers is insignificant. This outcome is consistent with that of (Kramaic and Fran, 2013) that the effect of reinsurance on insurance businesses' profitability was found to be insignificant in Romania.

The result also corroborates the work of (Soye et al 2022) which finds that the Premium Cession Ratio (PCR) has a positive but insignificant impact on the profitability of insurance businesses in Nigeria.
This study shows that the life insurer's profitability in Nigeria is affected by factors other than reinsurance cession.

5.0 CONCLUSION

The study sets out to determine the relationship between reinsurance premiums ceded and the profit after tax of life insurance businesses in Nigeria. The findings proved that a low positive and insignificant relationship exists between reinsurance premium ceded and the profit after tax of life insurance companies in Nigeria. This could be because life insurers in Nigeria retain more risks than they cede to reinsurers.
Based on the result of this study, the under-listed recommendations are proposed

I. Life insurers should design products that are suitable for different classes of people to increase patronage. This will help to bring more people into the pool generate more income and increase the predictability of claims.
II. Life insurers should increase cession to reinsurance as a way of diversifying risk portfolio, increasing capacity and increasing protection against catastrophic losses that could exceed retention

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