HEDGING RISK THROUGH REINSURANCE IN THE NIGERIAN INSURANCE COMPANIES: DO THE BENEFITS OUTWEIGH THE COSTS?

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Abstract

The role of reinsurance in insurance companies cannot be overemphasized as it plays significant impact on economic development of any nation. The management of the risks assumed by insurance companies is fundamental to the success of their operations. This study therefore examined hedging risk through reinsurance in the Nigerian insurance companies. This study is longitudinal in nature as data was gathered for period of10 years (2009 to 2018). Ten insurance companies out the fifty-eight registered companies were randomly selected for this study. Data was analyzed via regression analysis. The results revealed that, Net Claim ratio, Net Commission ratio, Net Retention ratio and Ratio of Ceded Reinsurance all have significant impact on performance of insurance companies in Nigeria. The study concluded that, hedging through reinsurance has effect on the profitability of insurance companies in Nigeria. Recommendations were profifered in line with the findings of the study.

Keywords: *Hedging risk, Reinsurance, Net Claim ratio, Net Commission ratio, Net Retention ratio and Ratio of Ceded Reinsurance.*

1.1 Background to the Study

The availability of insurance services is essential for the stability of the economy as business organizations can take more risks in the course of their operations. Aduloju and Ajemunigbohun (2017) established that, reinsurers are at the pinnacle of insurance market environment, because the abilities of reinsurers may bring about financial unrest within the insurance industry, which could result in spillover effect in the entire economy. Shah, Wilcox and Alip (2015) concurred that, a strong-based market for reinsurance activities allows for solvency of insurance companies particularly in the event of high severity losses such as hurricane and plane crashes. The section 6 (c) of the Insurance Act 2003 compelled insurance companies in Nigeria to have a reinsurance arrangement in tangent with each class of insurance for transactions as parts of the requirements for registration. This decision is in recognition of the importance of reinsurance in maintaining a virile insurance market.

The concept of reinsurance was introduced in order to hedge the possible risks of the future which may or may not take place. Scholars and practitioners (Abass& Obalola, 2018; Soye&Adeyemo, 2017; Aduloju&Ajemunigbohun, 2017) established that, reinsurance is antecedents of so many variables, prominent among include, Net Claim ratio, Net Commission ratio, Net Retention ratio and Ratio of Ceded Reinsurance. These proxies of reinsurance have been reported to be correlated with sustainability and financial performance of insurance companies (Obonyo, 2016; Soye&Adeyemo, 2017). However, these variables of reinsurance have been identified as major determinant of survival and sustainability of insurance companies. Not only that, these four determinants of reinsurance depended on one another as one of them cannot work independently to influence financial performance.

According to Ironkwe and Osaat (2019), financial performance of insurance companies is very vital not only to their continuous operations but to economy development of the Nation at large. Measuring performance of insurance company is normally expressed in net premiums earned, profitability from underwriting activities, annual turnover, returns on investment and return on equity (Adeniyi, Adeyinka&Babayaro, 2019). Performance of insurers has gained importance in the corporate finance literature because as intermediaries, these companies are not only providing the mechanism of risk transfer but also helps to channelizing the funds in an appropriate way to support the business activities in the economy (Chizoba, Eze&Nwite, 2018).

Most insurance companies in Nigeria are now practicing reinsurance programs due to its numerous contributions to the success of their business. Thus, it is invariably contributed no small measure in mitigating sudden and devastating occurrences of many business organizations. Therefore, examine the nexus of cost and benefit associated with hedging risk through reinsurance companies in Nigerian demand an investigation.

1.2 Statement of the Problem

In recent time, insurance companies have been facing untold hardship which hinders their performance (Ironkwe&Osaat, 2019). Studies (e.g Eling & Schmeiser, 2010; Laeven & Perotti, 2010) have earlier established that, large proportion of insurance companies had some challenges bothering inability to declare meaningful profit and while other companies had to be bailed out by the government to prevent default. In an effort to safe insurance from these challenges, hedging (a risk management) was introduced into the insurance system in other to form protection for insurers and correct the issues of underperformance. Khaliq (2017) stressed that as helpful as reinsurance is and even though it's widely practice by Nigerian insurance companies, their profit substantially remain questionable due to inability to assume large risk.

Most of the studies conducted to measure the nexus between reinsurance and performance of insurance companies were carried out in developed economies; such studies include the works of

Chang and Jeng (2015), Burca and Batrinca (2014), Vaughan and Vaughan (2014), The socio-cultural differences between developed and other developing countries limit the applicability of findings of these studies to developing countries as recommended by Li and Liu (2014) that, differences in economies is a significant gap in the literature. Therefore, there is need to replicate similar study here in Nigeria to see if the result will be beneficial.

Although, studies have been conducted on this phenomenon in Nigeria (Soye & Adeyemo, 2018; Abass & Obalola, 2017; Aduloju & Ajemunigbohun, 2017). These Researchers did not consider all these proxies of reinsurance (Net Claim ratio, Net Commission ratio, Net Retention ratio and Ratio of Ceded Reinsurance) as an integral approach in relation to performance (ROA & ROE) of insurance companies. Thus, the literature stream remains fragmented. On this basis, the study seeks to examine the nexus of cost and benefit of hedging risk through reinsurance in the Nigerian insurance companies. This very dimension in the context of insurance company has notably been neglected in developing countries like Nigeria and there is need to conduct this study in order to fill the gap in the literature.

1.3 Objectives of the of the Study

The main objective of the study is to examine the cost and benefit of hedging risk through reinsurance in the Nigerian insurance companies. The specific objectives include:

- i. To determine the Net Claim ratio impact on profitability of Nigerian insurance companies.
- ii. To ascertain the impact of Net Commission ratio on profitability of Nigerian insurance companies.
- iii. To examine the impact Net Retention ratio on profitability of Nigerian insurance companies.
- iv. To assess the impact of Ratio of Ceded Reinsurance profitability of Nigerian insurance companies.

1.4 Hypotheses of the Study

To address the research objective, the following research hypotheses were formulated in null forms:

H01:Net Claim ratio has no significant impact on profitability of Nigerian insurance companies

H0₂:Net Commission ratio has no significant impact on profitability of Nigerian insurance companies

H03:Net Retention ratio has no significant impact on profitability of Nigerian insurance companies

H04:Ratio of Ceded Reinsurance has no significant Impact on profitability of Nigerian insurance companies

2.1 Conceptual Review

Concept of Hedging

Kiio and Ambrose (2017) posited that hedging is a strategy that is usually used by firms to mitigate risk. The risk of future price movement, if not well managed can have adverse effect of a firm, thus hedging can be used to lessens such risk (Horne &Wachowicz, 2012). Hedging is used by individual or business organization to forestall negative effect that price change would otherwise have on profit (Brigham &Ehrhardt, 2014). It provides moderately economical and highly liquid positions similar to those obtained with diversified stock portfolios (Sharpe, Alexander & Bailey 2013). In order to hedge risk and achieve their hedging objectives, firms use different types of financial instruments including reinsurance, forward agreements, futures contracts, options or swaps.

Concept of Reinsurance

According to Oluoma, 1999, reinsurance is a contract by which an insurer called a reinsurer, undertakes to indemnify another insurer, called the reinsured (also known as direct office, primary office, cedant or ceding company), against the whole or a portion of the liability which the reinsured had undertaken on a particular policy of reinsurance. According to Cummins and Song (2008), reinsurance can simply be described as insurance of insurance. They added further that, insurance companies use hedging activities like reinsurance and derivative to cover the external risk of the firms in business and reduce the economical or financial risk occasioned by imperfections of capital market. Saheed and Mobeen (2014) stressed that, with reinsurance, the direct insurer can widen its underwriting capacity as the reinsurer actively participate in a part of his portfolio, which makes it possible for the direct office to accept more business and settle the higher losses accumulated from several contracts within the solvency requirements.

2.2 Theoretical Framework

The study used Corporate Demand Theory as the underpinning studies.

Corporate Demand Theory (CDT)

The theory was propounded by Mayers and Smith (1990) and later expanded and supported by Adiel (1996) and Plantin (2006). CDT explains the motives for an insurer to purchase or utilise reinsurance and also contains the premises for the positive and negative aspect of reinsurance. The theory proposes that utilisation of reinsurance is beneficial on the short

run while it's over reliance on reinsurance means that the risk undertaken by an insurer is low and may be at huge cost (Lee & Lee, 2012; Froot, 2001). Short run benefits of reinsurance include risk sharing, risk hedging, and reduction in loss volatility, increase in underwriting capacity, spread of assumed risks to mitigate agency problems, improved earnings to reduce expected taxes and the provision of real advisory services (Hoerger, Sloan & Hassan, 1990; Adiel, 1996; Redja, 2004; Cole & McCullough, 2006; Adams, Hardwick & Zou, 2008). On the other hand, reinsurance can be expensive and may lead to long term costs which include insufficient retained premium, increase in reinsurance premium, low profitability, and lower retention capacity. Major indicator to the high cost of reinsurance on the long run according to Plantin (2006), Lee and Lee (2012), and Cummins et al (2006) is linked to performance of insures.

2.3 Empirical Review

Adeniyi, Adevinka and Babayaro (2019) examined the relationship between insurance companies and financial intermediation in Nigeria. The objective of the study is to examine the relationship between Total insurance claims and Total insurance Income, Total insurance expenditure in order to determine the impact of insurance companies on financial intermediation efficiency in Nigerian insurance sector. The study relied basically on secondary data which are obtained from Central Bank of Nigeria statistical bulletin (CBN) and National Insurance Commission (NAICOM) annual report. The method of data analysis employed to achieve the stated objective is multiple regression analyses. It was revealed that there exist a positive or strong correlation between the dependent variable and independent variable in the insurance efficiency equation. Independent variables has been found as an increasing function of Dependent variable, this means that there is an increase in the level at which insurance companies fulfill their customers claims. It was also discovered that the parameter of total insurance income and other insurance expenditure in relationship with total insurance claim is statistically significant. The study therefore recommends that policies should be formulated to address firm-specifics and macroeconomic fundamentals that will drive down the high wedge between total insurance claims and total insurance income to further strengthen the efficiency of financial intermediation which will impact positively on economic growth. The study also recommends that there is need to strengthen the supervisory framework to curb tendencies for rent seeking behaviour of insurance company's management.

Dansu and Obalola (2018) investigated the effect of reinsurance utilization and dependence on the financial performance of non-life insurance companies in Nigeria. The study used secondary data which were analyzed with descriptive statistics, coefficient of determination and linear regression. The outcome of the findings revealed a significant positive correlation between the use of reinsurance and premium growth rate. Also, there is a significant positive relationship between reinsurance dependence and profitability of non-life insurance companies in Nigeria. Thus, the study recommended that for risk of high loss potentials, non-life insurers should use more of reinsurance facilities to ensure growth rate and stabilize premium. In an attempt to reduce cost and exposure to underwriting risks, the study enjoined Nigerian insurance companies should fortify their claims management activities. The present study used both primary and secondary data which was considered

was considered as gap in this study. In the present study, a period of five years will be considered from 2015 to 2019.

Sove and Adevemo (2017) examine the evaluation of impact of reinsurance mechanism on insurance companies' sustainability in Nigeria. Using expo-facto research design and inferential statistic analysis; the study tested the sign of the significant relationship between dependent variable (profitability (ROA)) and set of independent variable (Net Retention ratio, Net Claim ratio, Net Commission ratio, and Ratio of Ceded Reinsurance). The study used secondary data obtained from financial report of the insurance companies considered for the study, covering a period from 2009 to 2015. Linear regression analysis was used to find out the extent to which 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 findings of the study reveal that 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 that insurance companies in Nigeria should put proper reinsurance programs into priority, taking into consideration characteristics of their underwriting documents and consideration factors such as past loss experience, size of risks and frequency of losses. It was also recommended for insurance companies to have optimal retention levels in their risk diversification management basically to ensure favorable financial performance.

Obalola and Abass (2016) investigated if the excessive use of reinsurance is an indication of insolvency in the Nigerian insurance industry. The study reported the benefits of reinsurance to include increased capacity, technical expertise, allocation of risks and limitation of financial distress and established an inverse relationship between underwriting experience and demand for reinsurance. The study used purposive sampling techniques and ten (10) general insurance companies were selected from forty-nine (49) operating in Nigeria. Returns on assets (ROA), Returns on equity (ROE) and size for the period of 2004 to 2013 were used as indicators to measure the level of solvency while product diversification, claims ratio, combined ratio, reinsurance price, liquidity ratio and expense ratio were used as indicators to measure demand for reinsurance by primary insurers. The findings of the study revealed that there is significant relationship between the solvency and demand for reinsurance, though product diversification, combined ratio and reinsurance price are more significant than loss ratio, liquidity ratio and expense ratio. The present study used only listed insurance companies which by implication comply with regulatory requirements for listing and ensures effective returns on investors' fund. The present study also used a more recent data which cover from 2015 to 2019.

Fadun (2013)examines insurance as a suitable risk transfer mechanism for managing risks associated with the Nigerian banking industry. It explores risk and insurance; examines risks and features of insurable risks; outlines banking risks; highlights benefits of insurance to banks; and identifies banking risks and types of insurance banks purchase in Nigeria. The study adopts quantitative approach using the literature, and survey of 20 commercial banks in Nigeria selected through random probability sampling. Structured questionnaires were administered to 200 participants, 10 each from the 20 banks, selected through purposive sampling. The study concludes that banks purchase insurance to manage risks in

the Nigerian banking industry; insurance is beneficial to banks and the economy; and insurance enhances banks' operations in the Nigerian banking industry. Implications for practice suggest that: insurance, if adequately arranged, serves as security and stimulus to banks; insurance facilitates spread of risk and stimulates banks' operations; and insurance reduces loss through risk prevention and reduction education. Thus, the study highlights the suitability of insurance for managing risks associated with banks' operations in Nigeria.

3.0 Methodology

Correlation research design was adopted for the study as the data was gathered for period of10 years (2009 to 2019). Correlational research design is used to describe the statistical association between two or more variables. The data used for the study was be extracted from secondary sources only. Ten insurance companies out the fifty-eight registered companies will be randomly selected for this study. Therefore, financial statements of these companies were randomly selected to serve the purpose of the analysis of this study. The variables in respect of hedging risk through reinsurance include Net Claim ratio, Net Commission ratio, Net Retention ratio and Ratio of Ceded Reinsurance as the independent variables and that of dependent variable (Profitability) will be proxy by return on asset (ROA) and return on equity (ROE). Multiple regression was used as technique for data analysis.

Model specification

The model to be use to examine the hypotheses of the study is specified below: $Y = \beta_0 + \beta_1 NCR_{it} + \beta_2 NetCr_{it} + \beta_3 NRR_{it} + \beta_4 RCR_{it} + \epsilon_{it}$ Where:

Y Profitability (ROA & ROE) _ Net Commission ratio NCR = NetCr = Net Claim ratio Net Retention ratio NRR =RCR = Ratio of Ceded Reinsurance β= coefficient of parameter estimate **e** = error term t =time

4. Result and Discussions

This section provides a summary of the descriptive statistics of the dependent and independent variables for the Nigeria insurance companies from the year 2009 to 2018 with a total of 10 observations. The table shows the mean, minimum, maximum, standard deviation and number of observations for the dependent variable (ROA) and independent variables (Net Claim ratio, Loss ratio, Net Retention ratio, and Ratio of Ceded Reinsurance).

Table 4.1. Descriptive Statistics

	ROA	RCR	NRR	NCR	LOR
Mean	0.026010	0.535120	0.587920	0.326130	0.277180
Median	0.013350	0.601550	0.625500	0.336500	0.290600
Maximum	0.063700	0.840200	0.771700	0.467500	0.413700
Minimum	0.001500	0.026700	0.000000	0.212300	0.135500
Std. Dev.	0.022070	0.279679	0.223850	0.076676	0.078787
Skewness	0.677195	-0.51387	-1.95786	0.133228	-0.11032
Kurtosis	1.841227	1.982068	6.005388	2.406874	2.615299
Jarque-Bera	1.323802	0.871854	10.15219	0.176165	0.081947
Probability	0.515870	0.646665	0.006244	0.915685	0.959854
Sum	0.260100	5.351200	5.879200	3.261300	2.771800
Sum Sq. Dev.	0.004384	0.703985	0.450979	0.052913	0.055867
Observation s	10	10	10	10	10

Table 4.1 presents a summary of the descriptive statistics of the dependent and independent variables for Nigeria insurance industry for a period of ten (10) years from 2009-2018 with a total of 10 observations. Key figures, including mean, maximum, minimum and standard deviation value were reported.

As indicated in the above table, the industry's profitability measured by return on asset shows that Nigeria insurance companies achieved 2.6% on average aftertax profit over the last ten years from 2009 to 2018. From the total sample, return on asset had a maximum of 6.3%. It means that the most profitable year for Nigeria insurance industry among the sampled years earned 6.3 cents of profit after tax for a single naira (N1.00) invested in the assets of the firm. On the other hand, not profitable year of the sampled period has 0.15 cents of profit after tax for each naira (N1.00) invested in the assets of the companies and the value of return on asset deviate from its mean by 2.2%.

The average value for ratio of ceded reinsurance (RCR) as measured by net claims Incurred tonet premium earned was 53.5% with a maximum of 84.0% and a minimum of 2.6%. On the other hand, the least claim payments within those years of research is 2.6%.

The average value of the net retention ratio (NRR) was 58.79%. The average value indicates how well the industry has renewed the policy of their customers within these period of study. The maximum and minimum values were 77.17% and 0.000% respectively for the study period.

The outputs of the descriptive statistics indicate that the mean of net claim ratio (NCR) was 32.61%. This means that on average 32.41% of net claims incurred as percentage of net premium was paid to the policyholders. The maximum value of net claim ratio was 46.75% and a minimum value of 21.23%, and the value of net claim ratio deviate from its mean by 7.6%.

The average value of the loss ratio was (LOR) 27.71. The maximum and minimum values were 41.37% and 13.55% respectively for the study period. As regards the standard deviation, the value of claim ratio deviates from its mean by 7.87%.

Variables	ROA	RCR	NRR	NCR	LOR
ROA	1				
RCR	0.329	1			
NRR	-0.161	-0.585	1		
NCR	0.001	0.816	-0.869	1	
LOR	0.247	0.835	-0.463	0.715	1

Table 4.3. Correlation

- i. The correlation result in Table 4.2. shows that ratio of ceded reinsurance (RCR), net claim ratio (NCR), and loss ratio (LOR) have positive correlation with return on asset of Nigeria insurance industry within the period of this study. It refers that when these ratios increases, the profitability Nigerian insurance companies will move up. However, reinsurance risk has positive correlation with return on asset which indicates that while reinsurance risk decreases, at the same time performance of Ethiopian insurance companies will be decrease.
- ii. However, net retention ratio has negative correlation with return on asset of the Nigeria insurance companies, which means that the Nigeria insurance companies have not fully utilize reinsurance cover in their businesses.

The coefficient estimates of correlation in the above table shows 0.329, 0.001, and 0.247 for ratio of ceded reinsurance, net claim ratio, and loss ratio respectively. This implies that RCR, NCR and LOR are positively correlated with return on asset. However, net retention ratio has -0.161coefficient number which is negative correlation contrast to the above variables.

 Table 4.3. Regression Table

Variable Coefficient Std. Error t-Statistic Pro

С	0.282679	0.079571	3.552541	0.0163
RCR	0.103335	0.039299	2.629458	0.0466
NRR	-0.151995	0.050599	-3.003921	0.0300
NCR	-0.761613	0.208201	-3.658066	0.0146
LOR	0.093007	0.116826	0.796117	0.4621
R-squared	0.758593	Mean dependent var		0.026010
Adjusted R-squared	0.565467	S.D. dependent var		0.022070
S.E. of regression	0.014549	Akaike info criterion		-5.315793
Sum squared resid	0.001058	Schwarz criterion		-5.164500
Log likelihood	31.57896	Hannan-Quinn criter.		-5.481760
F-statistic	3.927974	Durbin-Watson stat		2.907868
Prob(F-statistic)	0.082937			

 $\begin{aligned} Y &= a_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + + \dots \dots b_n x_n, \text{ hence} \\ \text{ROA} &= a_0 + RCR_1 X_1 + NRR_2 X_2 + NCR_3 X_3 + LOR_4 X_4 + + \dots \dots b_n x_n \\ \text{ROA} &= 0.282679_0 + 0.103335_1 X_1 + -0.151995_2 X_2 + -0.761613_3 X_3 + 0.093007_4 X_4 + \dots \dots b_n x_n \end{aligned}$

The multivariate regression equation above shows the hedging of risks by insurance companies through reinsurance covers. From the regression table above, the sign of the coefficient of RCR and LOR are positive. This implies that ROA will increases by 10.33%, with a percent increase in the ratio of ceded reinsurance. Also, the insurance industry in Nigeria will experience an increase of 9.30% in its return on assets (ROA), if there is a percent increase in its loss ratio (LOR). In relations to utilization, this implies is that Ratio of Ceded Reinsurance (RCR) which measures the point to which the industry utilizes reinsurance to its policyholders on the short has significant impact on profitability of insurance companies in Nigeria. Also, the loss ratio as appositive effect on the ROA shows that the insurance companies in Nigeria have efficiently managed their losses within the period of study.

However, the regression model in table 4.4. reveals that net retention ratio (NRR) and net claim ratio (NCR) have negative effect on the profitability of insurance industry in Nigeria. The sign of coefficient of these two variables on ROA is negative. This implies that a percent increase in net retention ratio (NRR) will reduce the profitability (ROA) of insurance business in Nigeria by 15.20% if other variables are held constant. Also, a percent increase innet claim ratio (NCR) will decrease the profitability of insurance companies by 76.16 if other factors are held constant.

The regression table above reveals that R-square is 0.758593. this means that 75.86% of Y (ROA) jointly explained by the Four explanatory variables (RCR, NRR, NCR, and LOR).

The remaining 24.14% variation of Y can be explained by other variables not considered by this study.

The statistical significance of the coefficients of the explanatory variables, which could be established from the Standard Error, T-Statistic and the probability value of each coefficient, the results show that three out of the four independent variables (RCR, NRR, NCR) are statistical significant because their p-values are less than 0.05% level of significant. However, LOR is not statistically significant because its p-values is greater than 0.05% level of significant.

Testing of Hypotheses Hypothesis one

Net Claim ratio has no significant impact on profitability of Nigerian insurance companies. The result of the findings shows that net claim ratio(NCR) has negative effect on the return on asset (ROA) of insurance industry in Nigeria. **Table 4.3** above shows that, NCR has affected ROA significantly with the p-value of 0.0146 (< 0.05) level of significant. Therefore, we *reject hypothesis 1* which says net claim ratio has no significant impact on profitability of Nigerian insurance companies. And avers that net claim ratio has significant impact on profitability of Nigerian insurance companies.

Hypothesis two

Loss ratio has no significant impact on the profitability of Nigerian insurance companies. The result of the regression model reveals that loss ratio has positive effect on the profitability of insurance companies in Nigeria, but not significant, with the corresponding p-value of 0.4621 (< 0.05) level of significant in **Table 4.3** Therefore, we failed to *reject hypothesis21* which says Los ratio has no significant impact on the profitability of Nigerian insurance companies.

Hypothesis three

Net Retention ratio has no significant impact on profitability of Nigerian insurance companies.

The regression result above proved that net retention ratio has impacted the profitability of insurance industry in Nigeria negatively. **Table 4.3** above affirms that, NRR has affected ROA significantly with the p-value of 0.0300 (< 0.05) level of significant. Therefore, the study *reject hypothesis 3* which says net retention ratio has no significant impact on profitability of Nigerian insurance companies. And establishes that net retention ratio has significant impact on profitability of Nigerian insurance companies

Hypothesis four

Ratio of Ceded Reinsurance has no significant Impact on profitability of Nigerian insurance companies

The regression result above shows that ratio of ceded reinsurance has affected the profitability of insurance business Nigeria within the period of study positively. **Table 4.3** above establishes that, RCR has affected ROA significantly with the p-value of 0.0466 (<

0.05) level of significant. Therefore, we *reject hypothesis 4* which says ratio of ceded reinsurance has no significant Impact on profitability of Nigerian insurance companies. And affirm that ratio of ceded reinsurance has significant impact on profitability of Nigerian insurance companies.

5.0. Summary, Conclusion and Recommendation

5.1 Summary

The study general objective is to examine how reinsurance coverage has help insurance companies in Nigeria to hedge against risk. The study used ten (10) years period of time from 2009-2018 data from Nigeria Insurers Association Digest Financial Report. It is carried out by constructing a multivariable regression model using OLS. The overall result obtained from the regression model indicates that use of reinsurance cover has an effect on the profitability of insurance companies in Nigeria. The dependent variable used to measure insurance profitability was return on asset, and the set of independent variables are: net claim ratio, loss ratio, net retention ratio, and ratio of ceded reinsurance in order to attain the objective of the study.

5.2. Conclusion

Evidently, insurance companies are aware of the impact of reinsurance on their business operations, but the insurance industry as a whole is inattentive of the impact of such practice on it. Reinsurance as a secondary risk transfer mechanism help insurance firms to reduce the risk of bankruptcy and improves the financial stability of the insurer. This study is carried out to examine how reinsurance mechanism has helps to hedge against the risks facing insurance companies, particularly in Nigeria. Conclusively, the study is able to established that ratio of ceded reinsurance has really affected the profitability of insurance companies in Nigeria significantly and positively. However, net retention ratio and net claim ratio have significant and negative effect on the profitability of insurance companies operating in Nigeria. Also, loss ratio has positive influence on the profitability of the industry, but not significant.

5.3. Recommendation

Based on the findings of the study and the conclusions made, the following recommendations were made:

- i. Insurance companies in Nigeria should put proper reinsurance programs in place, taking into consideration the characteristics of their underwriting book such as past loss experience, size of risks and frequency of losses.
- ii. Effective underwriting and claims management practices should be properly embraced in the industry
- iii. Insurance company must ensure that valid claims are paid as efficiently as possible in order to contain escalation of claims costs.
- iv. The insurance companies should ensure that reinsurance commissions earned from reinsurance contracts cover acquisition costs.

5.4. Suggestion for Further Study

For insurance companies in Nigeria to be able to manage their business efficiently and hedges against many risks associated with their transactions the study will suggest the following for further study.

- i. Future research could explore the differences in the effect of different types of reinsurance treaties on the cost of equity, and firm value
- ii. Future research could explore the risk management-cost of equity relation in other industrial sectors such as banking
- iii. Future research could examine whether ownership/diversification influences risk/hedging decisions in particular ways.

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