IMPACT OF RISK ON THE FINANCIAL PERFORMANCE OF LISTED INSURANCE FIRMS IN NIGERIA

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Abstract
This study examined risk and financial performance of listed insurance firms in Nigeria for the period of ten years from 2011-2020. The population of the study consists of 22 insurance firms listed on the floor of Nigerian Stock Exchange as at 31st December. Secondary data was extracted from the audited financial reports of the sampled insurance firms. The data was analyzed using the multiple regression mode. The study findings revealed that solvency risk is positively and significantly influencing the financial performance of listed insurance firms in Nigeria. Conversely, liquidity risk revealed a statistical negative and insignificantly impact on financial performance. The study concluded that risk has a strong association with the financial performance of the firms for the period. The study recommends that the National Insurance Commission (NICOM) should have recapitalization base policy fir Nigerian insurance industries as this will enable he firms to underwrite bigger risk in the sector and help forestall flight.
Keywords: Financial performance, solvency risk, liquidity risk, insurance firms.

Introduction

The financial performance of insurance companies in Nigeria is very vital. It is the major determinant of survival and sustainability in the business environment, (Ironkwe & Ossat, 2019). Ironkwe et al (2019) further asserted that globalization and intense competition brought an increased risks where risk asset is becoming an integral part for the success of almost every organization, especially for the insurance sector because of their high-risk businesses, as the risks are associated with every client in the business and their own risk. More so, Gwamna, Miko and Abdullahi (2022) posited that financial performance of financial institutions is geared susceptible to high level of risk which if not check will affect performance of the firm.

Financial performance is basically categorized as financial and non-financial performance. Financial performance which is the focus of this study, is the result of performing the financial activity. It is the procedure of assessing the outcome of a firm's strategies and actions in monetary expressions. Financial performance is a desired objective for all profit oriented companies such as insurance firm (Yahaya & Lamidi, 2015). A company's financial performance relies on the ability to predict, track and handle risks and on the likelihood of insurance to compensate damages incurred by risks occurring.

Insurance companies are faced with various risks which are likely to have effects on their financial performance in one way or the other. An insurance company's profitability is considered to be reversed in connection with insolvency risk, and

increased financial emergency can directly affect the demand for insurance, especially as policy holders are likely to be concerned about the ability of insurers to meet their future fixed claims under insurance contracts (Summer, 1996). Liquidity risk in an insurance company is considered as less threatening than in bank because of higher frequency of money exchange takes place in banking industry compared to insurance industry (Eckles, Hoyt & Miller, 2014). However, liquidity risk is equally important in insurance as in banking sector because of interconnection of financial system leading to cash crisis and secondly liquidity risk may prove very expensive to insurer due to meeting the cost of liquidity and also impacting the assets and liability mismatch. The goal of any corporation is to maximize a certain degree of efficiency and effectiveness which is regarded as performance. Profit maximization has always been the primary goal of every business firm, and it is the yardstick for measuring financial performance. Despite the importance of general risk factors to the operations of insurance companies in Nigeria, insurance companies seem not to give enough priority to it. This is evident in their inability to assume larger unexpected risks due to poor risk capacity. Hence, some of them had voluntarily raise capital either through private or public placement. For example, in 2018, twenty five (25) out of fifty eight (58) registered insurance companies in Nigeria voluntarily sought for recapitalization process due to their inability to play in high risk market especially in the energy and aviation sectors. Inadequate capacity had further been observed by the nation's regulatory body, National Insurance Commission (NAICOM).

In recent time, Nigerian insurance companies have been facing untold hardship which affected their financial performance (Ironkwe & Osaat, 2019). The financial reports of the insurance firms suggested that, some of the insurance companies had some challenges bothering inability to declare meaningful profit. Notably among these firms are: Africa Alliance Insurance Plc reported a net loss of ₦7.2 billion naira in 2019, Corner Stone Insurance Plc also recorded a net loss in two consecutive periods of 2017 and 2016 amounting to ₦2.5 billion and ₦1.8 billion naira respectively, and more recently, Guinea Insurance Plc in its 2019 and 2020 financial year declared a net loss of ₦227.073 million naira and ₦795.0422 million naira respective, and finally, Niger Insurance Plc also declared a net loss within the same period of 2019 and 2020 amounting to ₦1.18 billion naira and ₦1.69 billion naira respectively.

Moreover, the Nigeria Bureau of Statistics assessment of the insurance firms revealed a 15.3% contraction in the general financial performance of Nigeria insurance firms, (NBS, 2021). This forms a practical issue the study intends to investigate. Furthermore, to the best of the researcher's knowledge, most of the studies conducted to measure risk and financial performance of insurance companies were carried out in developed economies, such studies include the works of Wu and Li (2021) in China, Ben Dhiab (2021) in Saudi, Tsvetkova, Bugaev, Belousova and Zhukova (2021) in Russia, Elsayed (2020) in Egypt and Yahiaoui and Mahdi (2020) in Algeria. The socio-cultural difference between developed and 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 literature. Therefore, this constitutes an environmental gap this study will address. To find solution to the research problems, this study intends to answer the questions, does risk influence the financial performance of listed insurance firms in Nigeria? It is premised on the aforementioned problem that this study seeks to examine the impact of risk through solvency and liquidity risk in the Nigeria insurance firms' financial performance. The specific objectives are as follows:

i. To determine the impact of solvency risk on the financial performance of listed insurance firms in Nigeria.
ii. To evaluate the impact of liquidity risk on the financial performance of listed insurance firms in Nigeria.

Review of Related Literature

This section presents the definitions and review of extant related studies of other authors in the related topic.

Conceptual Issues

Concept of Financial Performance: Financial performance of a firm is consider as the life of any business. According to Gwamna, et al. (2022) financial performance is a process of measuring the results of a company's overall assets, liabilities, equity, expenses, revenue and overall profitability in monetary terms, which are capable of generating revenues for the business, to ascertain its overall financial health over a given period of time and to be used in comparing similar firms across in the same industry or other sectors in aggregation. Similarly, Bekhet, Alhyari and Yusoff (2020) defined financial performance as a process of measuring the results of a firm's policies and operations in monetary terms.

Concept of Risk: Salaudeen, Salam and Mudashiru (2021) sees risk from insurance point of view to includes unpredictability, adverse deviation, uncertainty and possibility of unfortunate occurrence which are all linked to economic losses. Furthermore, Rafique, Quddoos, Akhtar and Karm (2020) defined risk as the uncertainty of the future financial outcomes which can influence the profitability and targets of the institutions. Similarly, Fali, Nyor and Mustapha (2020), sees risk as the probabilities of partaking an unexpected or adverse outcome. Thus, any act or action that leads to loss of any type can be labeled as risk.

Concept of Solvency Risk: Elsayed (2020) defined solvency margin as the amount of capital that is measured by net assets over net written premiums. Solvency margin must be sufficiently large to cover all the risks to which the concern is liable, within certain limits. Solvency refers to capability of firms meeting their long-term obligations and sustains continued growth and expansion (Mukino, 2018). Solvency

measures the amount of borrowed capital used by the business relative to the amount of owner's equity capital invested in the business, (Ironkwe & Ossat, 2019).

Concept of Liquidity Risk: Alalade, Ogbebor and Akwe (2020) submitted that liquidity is a financial term which depicts the amount of capital that is available for investment. According to Elsayed (2020) liquidity refers to an insurer's ability to fulfill its short-term obligations. The ratio of current assets to current liabilities is commonly measured. Gwamna et al (2022) defined liquidity risk as the possibility of s firm to not be able to convert its assets into cash to meet its short-tern financial obligations without giving up (loss) capital and income in the process.

Empirical Review

Wu and Li (2021) examined the solvency risk management in property-liability insurance companies in China. 35 Chinese-funded property-liability insurance companies and 18 foreign-funded property-liability insurance companies in China's insurance market from 2009 to 2015 were tested as the sample size of the study. The results found solvency is positively significant in small Chinese-funded insurance companies as well as foreign-funded insurance companies, while it is insignificant in large Chinese-funded insurance companies. The study recommended that small Chinese-funded insurance companies should actively develop non-auto insurance and improve the risk diversification effect of the diversified business structure. On the contrary, foreign-funded insurance companies should give play to their differentiated advantages and continue to concentrate on the operation of non-auto insurance in China's insurance market.

Ben Dhiab (2021) examined the determinants of profitability in the Saudi insurance sector. The empirical analysis is based on data relative to a sample of 20 Saudi insurance companies between 2009 and 2017. Generalized Least Squares, Ordinary Least Squares with panel-corrected standard errors, Difference GMM and finally System GMM was employed to analyze the data. The empirical findings suggested that the growth rate of written premium, the tangibility ratio and the fixed-assets ratio are the main factors affecting positively the profitability of Saudi insurance companies. Moreover, company size and liquidity are positively but insignificantly associated with profitability. On the contrary, the loss ratio, liabilities ratio, insurance leverage ratio, and to a less extent, the company age have negative effects on the profitability of Saudi insurance companies.

Methodology and Model Specification

The study adopted correlational and expo facto research design. This design is chosen and considered appropriate because of its ability to describe the statistical associations between two or more variables and allows for making predictions by testing of expected relationship between variables and the data used for the study are

not meant solely for the study. The population of the study consists of the twenty two (22) insurance firms listed in Nigeria Stock Exchange as at 31st December, 2020. However, the study used certain filters to arrive at the sample size of the study. Thus, only insurance firms with a complete data were selected as a sample size of the study to enable the researcher access to a balance panel data. Therefore, the sample size of the study is sixteen (16) insurance firms. The study used secondary data which was extracted from the audited financial reports of the sample insurance firms for the periods of ten years (2011-2020). The data was analyzed using the multiple regression technique. This technique is considered appropriate in view of the fact that it helps in establishing relationship between variables and also the effect cause and relationship between the variables.

The model of the study encapsulates the contribution of solvency risk (net income / total liabilities), liquidity risk (ratio of current assets to current liabilities) and return on equity (profit after tax / total equity) of listed insurance firms in Nigeria. It is mathematically represented thus:

$$ROE_{it} = \beta_0 + \beta_1 SR_{it} + \beta_2 LR_{it} + \varepsilon_{it}$$

Where:
ROE = Return on Equity
SR = Solvency Risk
LR = Liquidity Risk
β_0 = Constant term,
$\beta_1 - \beta_2$ = Coefficients of independent variables
ε = Error Term
i = Firms (DMBs)
t = Period

Results and Discussion

This section analyzes and presents the data of the study. It begins with descriptive statistics analysis, correlation matrix, diagnostic test of the study and presentation and discussion of the regression result.

Descriptive Statistics

The summary of the descriptive statistics of the variables are presented in table 1 where the minimum, maximum, mean, and standard deviation described.

Table 1: Descriptive Statistics

Variables	Obs.	Min.	Max.	Mean	Std. Dev.
ROE	160	-13.1857	1.3499	-0.0818	1.2384
SR	160	-1.1481	0.6995	0.0477	0.1758
LR	160	1.0049	5.3270	4.6070	7.5790

Source: STATA Output 2022

The table 1 above revealed that the return on equity of listed insurance firms in Nigeria has a mean value of -0.0818 with standard deviation value of 1.2384 and minimum and maximum values stood at -13.1857 and 1.3498 respectively. This implies that the average alteration of listed insurance firms in Nigeria is -0.0818 and the standard deviation from both sides of the mean is 1.2384. The minimum value of return on equity is -13.1857 which indicate that the least return on equity by the management of listed insurance firms in Nigeria will not cause significant distortion in the financial statement. However, the maximum return on equity value of 1.3498 entails a condition where the financial performance is covered by the distortion in the financial statement of listed insurance firms in Nigeria.

The average of solvency risk of listed insurance firms in Nigeria is 0.0477 with minimum value of -1.1481 and maximum value of 0.6995 respectively. Also, solvency risk revealed a standard deviation value of 0.17582 which implies that there is dispersion of data from the mean. Hence the data is normal.

However, liquidity risk has an average value of 4.6070 with minimum and maximum value of 1.0049 and 60.3270 respectively. This also implies that the data is not normally distributed as indicated by the wide dispersion from the mean. The table also revealed a standard deviation of 7.5790 for liquidity risk.

Correlation Matrix

The correlation matrix explains the degree of relationship between the dependent and independent variables of the study as well as the independent variables among themselves. The summary of the associations among the variables of the study is presented in table 2.

Table 2 Correlation Matrix

VARS	ROE	SR	LR
ROE	1.0000		
SR	0.2007*	1.0000	
	0.0110		
LR	-0.026	0.1157	1.0000
	0.9741	0.1452	

Source: STATA Output 2022

The result in Table 2 above shows a positive association exist between solvency risk (SR) and return on equity (ROE) of listed insurance firms in Nigeria evident by the correlation coefficient of 0.2007 and a p-value of 0.0110 which implies a weak positive correlation between SR and ROE. More so, liquidity risk (LR) is negatively associated with ROE. The result shows a coefficient of -0.026 with an insignificant p-value of 0.9741 implying a weak association between ROE and LR of listed insurance firms in Nigeria.

Regression Result

Table 3 below presents the summary of the pool ordinary least square regression results analysis. It shows the various values necessary for the discussion of regression results. Financial performance is the dependent variable proxy by ROE while risk is the independent variable proxy by solvency risk (SR) and liquidity risk (LR).

Table 3: Regression Results

Variables	Coefficient	T-Value	P-Value
Constant	-0.8353	-2.50	0.014
SR	0.7200	1.21	0.030
LR	-0.0027	-0.21	0.830
R^2			**0.5616**
F-Stats			**3.87**
F-Prob.			**0.0025**

Source: STATA Output, 2022

Table 3 shows that the functional relationship between the dependent and independent variables is: **ROE = - 0.8354 + 0.7200SR - 0.0027LR**

The result shows that the R^2 which is the combined coefficient of determination indicates the extent to which the independent variables jointly explain the total variation in the dependent variable. Thus, it signifies that 56.16% (0.5616) of the total variation in return on equity of listed insurance firms Nigeria is caused by solvency risk and liquidity risk while the remaining 43.84% is explain by other factors not captured in this model. This indicates that the explanatory variables are well selected and combined because the R^2 of 0.5616 satisfies the minimum rule of thumb. The F-statistics of 3.87 signifies that the model of the study is fitted.

The analysis revealed that solvency risk is positively and significantly influencing the financial performance of listed insurance firms in Nigeria as indicated by a coefficient value of 0.7200 and p-value of 0.030. This implies that for every 1 increase in solvency risk, it will lead to an increase in financial performance by 72% (0.7200). The result agreed with prior studies of Wu and Li (2021), Elsayed (2020) and Yahiaoui and Mahdi (2020).

However, liquidity risk revealed a statistical negative and insignificantly impact on financial performance of listed insurance firms in Nigeria with coefficient value of -0.0027 and a p-value of 0.830 respectively. This implies that for every increase in liquidity risk, the financial performance of the listed insurance firms will decrease. Thus, liquidity risk is negatively and statistically insignificant with financial performance of listed insurance firms in Nigeria. The study finding is only in tandem with studies of Tsvekova, Bugaev, Belousova and Zhukova (2021), Al Omari (2020), Ukpong and Folarin (2020) and Bekhet, Alhyari and Yusuf (2020).

Policy Implication of the Findings

The findings of this study have policy implications particularly for the management and stakeholders of the listed insurance firms in Nigeria. The findings of the study have shed more light on the explanatory variables that have important effect in explaining the explained variable (financial performance) of listed insurance firms in Nigeria. Solvency risk was found to be doing enough in curbing insolvency of the listed insurance firms in Nigeria. The implication of this finding is that having adequate risk management mechanisms will lessen solvency risk.

5. Conclusion and Recommendations

This study examines two dimension of risk of listed insurance firms in Nigeria. Therefore, the following conclusions were drawn which were built from the findings of the study.

i. The study concludes that solvency risk is statistically significantly influencing the financial performance of insurance as observed by the significant positive relationship between solvency risk and financial performance of listed insurance firms in Nigeria.
ii. On liquidity risk, the study concluded that liquidity risk is positively but insignificantly influencing the financial performance of listed insurance firms in Nigeria.

Recommendations

Arising from the above and based on the outcome of the study, the study advances some recommendations for policy, practice and academic research.

i. The National Insurance Commission (NAICOM) should conclude on the ongoing recapitalization exercise in the Nigerian insurance industry as this would enable insurers to underwrite bigger risks in the sector and help forestall capital flight. Insurers should embrace regular recapitalization exercise and take initiatives to increase its capital size without waiting to be prompted by regulators because recapitalized firms are more likely to be attractive to investors, employees, customers and other relevant stakeholders than firms with thin capital structure. Recapitalization plan should be included in insurance companies' strategic plans.
ii. Insurance companies should strive to attract more customers and boost their income through provision of enhanced estimation techniques on insurance policy premium price to maximize their net premium earning and net asset. Insurance firms should consider investing there idle cash on various sectors by diversifying their investment portfolio.

References

Alalade, Y. S., Ogbebor, P. I. & Akwe, M. (2020). Liquidity risk and profitability of listed deposit money banks in Nigeria. *Journal of Finance and Accounting, 11*(8), 126-139.

Al Omari, R. (2020). The impact of liquidity, solvency on profitability: An analysis of Jordanian pharmaceutical industries sector. *Systematic Reviews in Pharmacy, 11*(11), 767-770.

Bekhet, H. A., Alhyari, J. A. & Yusoff, N. Y. M. (2020). Highlighting determinants of financial performance of the Jordanian financial sector: Panel Data Approach. *International Journal of Financial Research, 11*(6), 237-252.

Ben Dhiab, L. (2021). Determinants of insurance firms' profitability: An empirical study of Saudi insurance market. *Journal of Asian Finance, Economics and Business, 8*(6), 235-243.

Deyganto, K. O., & Alemu, A. A. (2019). Factors affecting financial performance of insurance companies operating in Hawassa City Administration, Ethiopia. *Universal Journal of Accounting and Finance, 7*(1), 1-10.

Dabo, Z., Andow, H. A., & James, H. K. (2018) Solvency risk and financial performance: evidences from listed insurance firm in Nigeria. *Crawford Journal of Business & Social Sciences, 2*, 125-133.

Elsayed, M. (2020). The effect of company specific factors on the profitability of property and casualty insurance industry in Egypt. 427-466.

Fali, I. M., Nyor, T. & Mustapha, L. O. (2020). Insurance specific risk and profitability: Evidence from Nigerian Insurance Firms. *International Journal of Accounting, Finance and Risk Management, 5*(3), 141-148.

Gwamna, Y. J., Miko, N. S. & Abdullahi, M. (2022). Risk and financial performance of listed deposit money banks in Nigeria. *POLAC international journal of economics and management science, 8*(1), 1-11.

Kioko, C. M., Olweny, T., &Ochieng, L. (2019). Effect of financial risk on the financial performance of commercial banks in Kenya listed of the Nairobi Stock Exchange. *The Strategic Journal of Business & Change Management, 6*(2), 1936-1952.

Mukino M. A. (2018). Effect of financial risks on the financial performance of listed insurance companies at Nairobi securities exchange. Unpublished Master's thesis. University of Nairobi.

Rafique, A., Quddoos, M. U., Akhtar, M. H. & Karm, A. (2020). Impact of financial risk and financial performance of banks in Pakistan: the mediating role of capital adequacy ratio. *Journal of Accounting and Finance in Emerging Economies, 6*(2), 607-613.

Risal, N. (2020). Determinants of insurance companies' profitability: analysis of non-life insurance companies in Nepal. *Asia Pacific Journal of Finance and Risk Management, 11*(3), 9-17.

Salaudeen, T. O., Salam, R. A. & Mudashiru, G. A. (2021). Impact of net claim ratio and net retention ratio on financial performance of insurance companies in Nigeria. *Global Journal of Education, Humanities and Management Sciences, 3*(1), 115-124.

Yahiaoui, S. & Mahdi, O. (2020). The determinants of financial performance of non-life insurance companies in Algeria. *Journal of Business and Management Sciences*, *16*(1), 60-77.

Yahaya, O. A. & Lamidi, Y. (2015). Empirical examination of the financial performance of islamic banking in Nigeria: a case study approach. *International Journal of Accounting Research, 2*(7), 1-13.

Tsvetkova, L., Bugaev, Y., Belousova, T., Zhukova, O. (2021). Factors Affecting the Performance of Insurance Companies in Russian Federation. *Montenegrin Journal of Economics*, *17*(1), 209-218.

Ukpong, M. S. & Folarin, J. O. (2020). Financial risk and the valuation of life insurance companies in Nigeria: A 2008-2017 analysis. *European Journal of Management and Marketing Studies, 5*(4), 96-112.

Wu, S. & Li, Y. (2021). Impact of the business structure on solvency of property-liability insurance companies and its mediating effect. Hindawi Discrete Dynamics in Nature and Society https://doi.org/10.1155/2021/5457846