Risk Recognition and Analysis Among Listed Insurance Firms in Nigeria

LUQMAN O. ADARANIJO

Abstract

This research analysed how well insurance firms in Nigeria can identify and assess potential risks. To ensure sufficient risk capture in the business operations of insurance organisations, the study looked specifically at how risks are described, recognised, and analysed. A descriptive survey method was used for this study. A total of 31 businesses, including 22 general insurance providers and 9 life insurance providers, were surveyed, representing 61% of the industry's capacity, and 100 employees, including at least 3 from each business, were randomly selected to fill out questionnaires. SPSS was used for both descriptive and inferential analysis. Based on the results, it is clear that insurance companies in Nigeria are aware of the need for, and are taking steps to describe, identify, analyse, respond to, and monitor risks. In a similar vein, the findings demonstrated that the success of insurance companies in Nigeria is influenced by their ability to accurately assess and quantify risk. The study found that Nigeria's insurance sector is prepared for and sensitive to risk recognition, making it one of its major roles in ensuring the country's economic success. The study concluded that the Nigeria insurance industry is well fitted and responsive to risk recognition which is their key roles for sustaining business growth in the country. Based on the results of the research, it is recommended that the Nigerian government enact regulations mandating the use of widely known risk monitoring procedures for incorporation into the insurance industry's code of conducts.

Keywords: *Insurance, Risk, Management, Institution, Finance*

Introduction

Established businesses exist for a variety of reasons, but one of the most common is the desire to turn a profit while also satisfying a clear consumer demand. All economic endeavours, however, are exposed to both internal and external dangers. Recent years have seen a rise in the importance of risk management across all industries in order to help businesses safeguard their interests while still pursuing their missions. Organizations can guarantee success, lessen the blow of threats to manageable levels, and boost their chances of capitalising on openings all thanks to risk management (Paul Hopkin, Institute of Risk Management, 2012). Sometimes the losses from these risks are substantial enough to threaten the continued existence of a profitable business if proper risk management is not put in place.

As threats to businesses grow, so does the importance of effective risk management. Insurance firms must effectively control their risk exposure and analyse compensation claims filed by insured parties to prevent financial ruin. Although "most insurance companies cover insurable risks without carrying out proper analysis of the predicted claims from clients and without putting in place a framework of identifying acceptable

risk reduction strategies," (Kadi, 2003), this is not the case. A buildup of customer claims caused by ineffective risk management could have a negative impact on an insurer's bottom line (Magezi, 2003).

Few studies have shown that insurance activities promote financial stability, allow different risks to be managed more efficiently, encourage the accumulation of new capital, and help mitigate losses and the negative consequences that random shocks may have on capital investment, as stated by Levine (2004). According to Rejda (2003), "risk management involves a process of recognising loss exposures encountered by an organisation and selecting the most appropriate approaches for handling these exposures successfully."

Research on the effects of risk management on the corporate performance of insurance firms in the Nigerian environment is limited, despite the fact that several empirical works have offered various explanations for the industry's dismal financial showing. As a result, insurance businesses in Nigeria may be struggling financially due to poor risk management. Hermanson and Rittenberg (2013) and Kiragu (2014), among others, suggest a connection between risk management and organisational performance, but these studies have primarily focused on banks and other financial institutions, and the only studies that have dealt with large financial institutions in advanced countries. To date, there has been scant research on how risk management procedures may affect the profitability of Nigeria's insurance firms. This research aims to help close that knowledge gap by analysing the impact of proper risk recognition and management strategies on the profitability of Nigerian insurance companies.

Concept of Risk

Various definitions of risk have been proposed; none of them is likely to be wholly accurate, but they do serve as convenient abstraction tools and common focal points. According to Webster, risk is "the possibility of injury, damage, or loss" (Habegger, 2008). Risk, in the context of finance, is the possibility that outcomes will differ from projections. Risk is defined as the dispersion of returns in the capital asset pricing model. In both professional and personal contexts, the phrase "risk" can indicate a number of different things, as Harrington (1999) explains. To put it simply, risk is used to characterise any circumstance in which its conclusion is unknown. The risks in life are evident, and even the near future can be a complete mystery. Variability in results relative to an expected value is what is meant by "risk" when applied in the contexts of statistics, financial management, and investment management.

Terje and Ortwin (2009) argue that there is unlikely to be a unified definition of risk in the academic literature, but that there may be some shared features:

1. An expected loss is one unit of risk (Willis, 2007)
2. Probability equals future negative outcomes (Campbell, 2005)
3. The likelihood of something bad happening is what we call "risk."
4. To quantify the potential for and degree of harm, we use a concept called "risk."
5. Risk, then, is the fact that a choice is made in the face of certain probability.
6. Combining the likelihood of an event with its potential outcomes constitutes risk (ISO, 2002).

7. Risk is a collection of possible events, each of which has an associated probability and outcome, according to the seventh definition of risk (Kaplan and Garrick 1981; Kaplan 1991).

Types of Risk

No company is immune against danger, no matter how little, where it is situated, what products or services it offers. It is important to remember that the repercussions of failing to manage risks can be severe, including the shutdown of operations and significant financial losses. As a result, business owners who are aware of the threats they face will be better able to take the precautions that are essential to safeguarding their investments.

There are internal and external hazards that a company may face. Business, liquidity, financial, exchange rate, political, market, strategic, operational, and compliance risks are just a few of the many types of hazards that might arise.

External Risks

These dangers stem from the firm's inability to alter the external environment that affects it. These types of risk are as identified and discussed below.

First, there is the risk of financial loss due to commitments to others. It is connected to the fact that there's a chance the company won't have enough money to pay its bills. Debt service, dividends, taxes, and financial transaction settlements are all examples of such commitments. This type of risk also includes the possibility that money won't come in from somewhere when it's needed.

Two, systematic risks are those that cannot be mitigated or foreseen using conventional methods. As a result, it becomes extremely difficult to safeguard the company. Examples of such threats include the possibility of a change in interest rates, the possibility of new laws being passed, and the possibility of environmental upheaval.

Third, there is the danger of speculation, which is incurred when money is put into a high-risk investment like the oil sector or the stock market. Some domestic corporations borrowed money to buy shares in an IPO because they had limited cash on hand. All of this was totally conjectural. Share investments were wiped out when the Nigerian stock market bubble burst.

Fourth, there is the possibility of loss due to changes in exchange rates. This has the potential to disrupt international trade and investment. Changes in the value of foreign currencies relative to the domestic currency can have a negative impact on domestic industries. If this were to happen, businesses would have less money available to pay for imports of materials and supplies needed to make their products. Investing abroad carries the possibility that your home currency will be worth less than the foreign currency if exchange rate risk is severe. Earnings from the overseas investment could be seriously harmed as a result of this.

Fifth, there is market risk which refers to the uncertainty and potential decline in sales as a result of price swings or volatility in the market for a company's goods or services. If the market price for the company's products were to decline and stay low for an extended period of time, the company's expected revenue would drop, and it might not be able to satisfy its operational obligations.

The sixth form of risk is political risk, which refers to the danger of putting money into a foreign country with an uncertain government. This risk can emerge if there is a dramatic shift in the political system. This term refers to the possibility that the value of an investment may decrease and its return may be reduced due to factors associated with a particular country's political system. Therefore, countries with unstable political or economic situations are more likely to face this form of danger.

Internal Risk

The internal complexities of a business provide these risks. The forms of internal risks are stated as follow:

1) Strategic Risk: This type of risk is said to be future-oriented and can arise when:

i). a new competitor enters a firm's industry;
ii). two businesses in the industry merge to create a powerhouse;
iii). the firm faces decisions about creating new products;
iv). the firm faces decisions about entering new markets; and
v). the firm is considering the location of a disaster recovery site in relation to the main Centre of operations.

When the recovery site is too close to the primary centre of activities, there is a chance of both buildings being destroyed in the event of a fire. Communication and logistical impediments are additional challenges when the facility is far from the main centre of operations.

2) Unsystematic Risk: The second form of risk is known as "unsystematic risk," and it is related to the unique or unpredictable characteristics of the assets themselves. Diversification is a method that can be used to reduce or guard against these kinds of hazards. Strikes by employees and shifts in policymaking by management are two instances of the dangers of this kind.

3) Liquidity Risk: there is the possibility of insufficient cash flow, or "liquidity risk," if the company struggles to satisfy its immediate financial commitments. The projected lack of liquidity stems from having to rely on antiquated machinery that could malfunction. As a result, the company would lag behind the competition in adapting to the market.

4) Operational Risk: The risk of loss due to flawed processes, people, and systems, as well as external occurrences. When a business faces operational risk, it means there is a chance that a transaction or process will fail because of factors like bad planning, inexperienced workers, or outside interference. Fraud risk and the likelihood that a company will not be able to fulfil the terms of a transaction it has agreed to due to internal issues are both examples of operational risk.

5) Compliance Risk: there is the danger that the company will incur significant financial penalties for violating applicable rules and regulations in the locations in which it does business. Another source of this type of risk is the potential for the company to

breach a legally enforceable contract made in the process of conducting business. Legal proceedings, the expense of legal processes, the confiscation of operational equipment, etc., may all result from a breach of this kind.

6) Business Risk: the firm faces business risk from the inherent volatility of its earnings due to the dynamic marketplace. Earnings volatility may be caused by issues with the company's goods, ownership structure, board makeup, management quality and conduct, or market position.

Source of Risk

The following are some common sources of risks according to James, Satldra and Robert (2001):

Property risk: Businesses that own, lease, or use property run the risk of having such property vandalised, destroyed, or stolen. If the damage is severe, operations may have to be suspended temporarily, and the cost of repairing or replacing the destroyed assets could wipe out any profits.

Liability risk: there is the risk of liability, which arises from having to pay damages to people who have been harmed and fine those who are accountable for those damages, even if the liable party is ultimately absorbed by another entity.

Financial risk: Speculative in nature and with the potential to affect a company's bottom line is the third type of risk, financial risk. Credit risk, foreign exchange risk, commodity risk, and interest rate risk are all examples of potential financial hazards.

Life, health and loss of income risks: Threats to one's own life or health, as well as the potential for financial setbacks, are something every company and individual must contend with. Someone who gets sick or hurt in an accident will have to pay for medical care. Also included is the sum an employer must shell out to cover those bills in the event an employee incurs them due to an accident or illness, regardless of the employee's ability to work. Thus, risk is proportional to the two-dimensional sum of occurrences and consequences plus the uncertainty connected with them (will the events occur, what will be the consequences) (Aven 2007).

Empirical Review

Studies have demonstrated varying results on the extent of risk recognition among insurance firms. Based on their research on the factors that affect the profitability of Kenya's commercial banks, Ongore and Kusa (2013) draw the conclusion that managerial and board decisions matter. According to Ongore and Kusa (2013), macroeconomic factors like inflation and gross domestic product do influence performance, albeit to a small extent. That when the economy is doing well and GDP is rising, people are more likely to take out loans, resulting in higher profits for financial institutions, and the opposite is true when the economy is doing poorly and GDP is falling.

Financial leverage and the spread between return on assets and net borrowing cost, when compounded, result in return on equity, which is a measure of profitability, as discovered in a study by Lundholm et al. (2012) using a sample of 51,866 enterprises from 69 countries. It follows that a company's profitability is affected by its access to

finance. In a study conducted by Lundholm et al. (2012), the authors found that leverage had a detrimental impact on profitability, leading highly lucrative businesses to seek funding internally. Size of the organisation, management competence, liquidity, and changes in leverage led to changes on the profits of insurance companies, as found in an analysis of the factors affecting financial performance of Jordanian insurance companies listed at the Amman stock market in Jordan conducted by Almajali, et al. (2012).

Capitalization levels in the insurance sector are rising, indicating a strengthening market. According to a study conducted by Hamadu *et al*. (2011) on the topic of intelligence information generation, dissemination, and responsiveness in the performance of insurance business in Nigeria, the industry's capital has increased from $243 million to $1.62 billion as a result of a consolidation plan that has bolstered the industry's financial capacity.

According to the research of Chaudhary and Kiran (2011), the Indian life insurance market has expanded significantly. Life insurance agencies in India increased in number from 2199 in 2000-01 to 5373 in 2006-07, a growth rate of 11.9% during the study period. While the number of Life Insurance Corporation of India (LIC) agencies increased from 2186 in 2000-01 to 2301 in 2006-07, a growth rate of 0.6%, the number of private life insurance agencies increased dramatically, from 13 in 2000-01 to 3072 in 2006-07, a growth rate of 365.3%. According to Chaudhary and Kiran (2011), growth in the number of life assurance financial advisers was 39.99% in 2006–07, whereas growth in the number of advisors employed by the Life Insurance Corporation of India (LIC) was 4.75 %. The number of private life insurers contributed by increased by 140.3%. While life insurance premiums increased by 35.1%, the number of new life insurance companies expanded by 16.1%, as explained by Chaudhary and Kiran (2011). The number of new policies issued by LIC increased by 10.4%, with premiums increasing by 26.7%; the number of new policies issued by private life assurers increased by 72.7%, with premiums increasing by 189.6%. The varied insurance offerings, the emphasis on the brand, and the inclusion of perks like rider coverage have all contributed to this expansion. Mergers in the insurance sector lead to a higher valuation of both the acquiring and the acquired company, both of which contribute to the industry's expansion.

Akhigbe and Madura (2001) state that after a merger or acquisition, both companies benefit financially. Because of economies of scale, services can be provided for less money. Other factors include the elimination of superfluous locations and the sharing of knowledge between businesses (Akhigbe and Madura, 2001).

Soverall (2012) argues that financial institutions must be regulated to behave in the public interest and that a political structure which supports financial regulatory reforms must be in place. Momo and Ukpong (2013) claim that the directors of the defunct Equitable Life Assurance Society of the United Kingdom illegally subsidised current annuity rate policies rather than the guaranteed annuity rate policies, leading to the company's collapse in the year 2000. When the Enron energy company in Argentina, USA, fell in 2001, it was largely due to the government's permissiveness toward business. Skandia, the largest insurance company in Sweden and a global pioneer in delivering variable annuities and other savings products, saw its image shaken in 2003

when three of its senior executives came under investigation for squandering corporate funds, according to Momo and Ukpong (2013).

Theoretical Framework: Data Envelopment Analysis (DEA) Theory

Utilizing benchmarking research, data envelopment analysis pushes insurance companies toward industry best practises (Barros & Obijiaku, 2007). Since the theory assumes that the production formula of the fully efficient decision making unit is known in advance, the analysis determines resource efficiency without requiring a production formula; the theory employs various outputs to evaluate the efficiency of the system (Huang, *et al.*, 2012).

Data envelopment analysis is used to identify the most effective unit in a set of observed units and to separate it from the least effective ones, as stated by Wu et al. (2007). In addition, the report details the extent of inefficiencies and the scope of potential upgrades for less efficient units. Which DMU (decision making unit) most closely exemplifies ideal procedures is identified by DEA. According to Wu et al. (2007), DEA employs linear programming to conduct an all-encompassing analysis of each DMU in the event of many input-output situations, measures each DMU's performance in comparison to an envelopment surface made up of other DMUs, and finally demonstrates how the analysed DMU can be made more efficient. By comparing the cost of inputs like equity capital and labour with the value of outputs like premium income and new businesses written, data envelopment analysis can provide insight into the productivity of insurance companies (Bawa & Ruchita, 2011). The insurance industry relies heavily on data envelopment analysis because of its usefulness in determining the level of efficiency necessitated by the ever-increasing risks that are encountered (Bawa & Ruchita, 2011).

Methodology

In achieving the purpose for which this study was set out, a descriptive survey research design was adopted. The population of the study consisted of 51 insurance companies operating in Nigeria. Among these insurance companies, 31 companies were surveyed consisting of 22 general insurance companies and 9 life insurance companies, giving a 61% of the industry capacity. The choice of these companies was as a result of their gross premium and market share capabilities as documented by the Nigeria Insurers Association (2014). A total of 100 staff, who are permanent employees and have spent not less than 5 years with their respective insurance firms were purposively selected from the sampled insurance companies. The data for the study were obtained through primary source with the aid of questionnaire. The data were analysed using both descriptive and inferential statistics with the aid of SPSS.

Findings

Risk Recognition and Analysis among Insurance Firm in Nigeria

The risk recognition and analysis strategy evaluated in this study include risk description, identification, analysis, response and monitoring. In the first instance, the study evaluated risk description practices of the insurance firms. Table 1 presents responses of the

respondents to risk description, one of which is interest rate risk. The result shows the respondents agreed that interest rate risk is an extreme risk for insurance company to bear given the mean value of 3.67 and chi-square of 24.100 with Asymp. Sig. of .000 which implies that the interest rate risk is significant to risk description. It also reveals that financial risk is an extreme risk for company. It therefore indicates that the respondents agreed with the fact that financial risk is an extreme risk for insurance company to curtail given the mean value of 3.59 and chi-square of 18.100 with Asymp. Sig. of .001 which implies that financial risk significantly drives risk description.

Result on inflation and sudden change in price shows that the respondents agreed inflation and sudden change in price is a high risk for insurance company given the mean value of 3.64 and chi-square of 27.100 with Asymp. Sig. of .000 which indicate a positive impact of inflation and sudden change in price with risk description. Furthermore, regarding the claims and dispute, the result shows that the respondents agreed that claims and dispute are both low and high risk for insurance company given the mean value of 3.34 and chi-square of 10.300 with Asymp. Sig. Of .036 which means that claims and dispute is a significant risk description strategy. Finally, specific risk reveals that agreed that specific risk is an extreme risk for insurance company given the mean value of 3.79 and chi-square of 32.300 with Asymp. Sig. of .000 which implies that specific risk significantly contributes to risk description.

Table 1: Descriptive statistics on Risk Description

Risk Description	Negligible Risk Frq (%)	Low Risk Frq(%)	Moderate Risk Frq (%)	High Risk Frq (%)	Extreme Risk Frq (%)	Mean Value	Chi-Square	Asymp. Sig.
Interest rate risk	4(4.0)	15(15.0)	24(24.0)	24(24.0)	33(33.0)	3.6700	24.100	.000
Financial risk	10(10.0)	11(11.0)	21(21.0)	26(26.0)	32(32.0)	3.5900	18.100	.001
Inflation and sudden changes in price	4(4.0)	15(15.0)	20(20.0)	35(35.0)	26(26.0)	3.6400	27.100	.000
Claims and disputes	10(10.0)	24(24.0)	15(15.0)	24(24.0)	15(15.0)	3.3400	10.300	.036
Specific risk	4(4.0)	10(10.0)	24(24.0)	27(27.0)	35(35.0)	3.7900	32.300	.000

Source: Field Survey, 2022

Risk Identification

The findings regarding risk identification as part of risk recognition and analysis strategy are contained in Table 2. One of the identification strategies usually adopted is check list. The result shows that the respondents agreed that check list is always used in insurance company to identify risk given the mean value of 4.06 and chi-square of 62.800 with Asymp. Sig. of .000 which implies that the check list is significant to risk identification.
It also reveals that the respondents agreed with the fact that brainstorming is always used for identifying risk in insurance company given the mean value of 4.00 and chi-square of

52.800 with Asymp. Sig. of .000 which implies that brainstorming significantly drives risk identification. Also, result on site visit reveals that 7.0% respondent agreed that it is never used to identify risk, 32.0% said that it s occasionally used, 22.0% concluded that it is frequently used and 39.0% respondent said that it is always used. This means that the respondents agreed that site visit is always used to identify risk in insurance company given the mean value of 3.93 and chi-square of 23.120 wit Asymp. Sig. of .000 which means that site visit has significant effect on risk identification.

Furthermore, using risk data compiled from previous experience shows that 2.0% respondent said that it is never used, 12.0% agreed that it is used occasionally, 36.0% said that it is frequently used, 28.0% said that it is used very frequently and 22.0% concluded that it is always used. It means that the respondents agreed that using risk data complied from previous experience is frequently used to identify risk in insurance company given the mean value of 3.56 and chi-square of 35.600 with Asymp. Sig. of .000 which means that using risk data complied from previous experience significantly affect risk identification. Finally, case-based approach reveals that the respondents agreed that case-based approach is always used for identification of risk in insurance company given the mean value of 3.66 and chi-square of 26.000 with Asymp. Sig. of .000 which implies that case-based approach significantly contributes to risk identification.

Table 2: Descriptive statistics on Risk Identification

Risk Identification	Never	Occasionally	Frequently	Very frequently	Always	Mean Value	Chi-Square	Asymp. Sig.
	Frq (%)	Frq (%)	Frq (%)	Frq (%)	Frq (%)			
Check list	4(4.0)	6(6.0)	18(18.0)	24(24.0)	48(48.0)	4.0600	62.800	.000
Brainstorming (from project participants/risk team)	4(4.0)	4(4.0)	20(20.0)	32(32.0)	40(40.0)	4.0000	52.800	.000
Consulting experts	2(2.0)	6(6.0)	22(22.0)	40(40.0)	30(30.0)	3.9000	51.200	.000
Site visit	7(7.0)	32(32.0)	22(22.0)	0	39(39.0)	3.9300	23.120	.000
Using risk data compiled from previous experience	2(2.0)	12(12.0)	36(36.0)	28(28.0)	22(22.0)	3.5600	35.600	.000
Case-based approach	6(6.0)	10(10.0)	28(28.0)	24(24.0)	32(32.0)	3.6600	26.000	.000

Source: Field Survey, 2022

Risk Analysis Methods and Techniques

Table 3 presents risk analysis methods, one of which it tested qualitative analysis. The result shows that the respondents agreed that qualitative analysis is always used in insurance company for risk analysis methods given the mean value of 3.72 and chi-

square of 31.200 with Asymp. Sig. of .000 which implies that quality analysis is a significant analytical approach being adopted by the Nigeria insurance firms. It also reveals that semi-qualitative analysis is used very frequently for risk analysis methods in insurance company given the mean value of 3.75 and chi-square of 49.700 with Asymp. Sig. Of .000 which implies that semi-qualitative analysis significantly drives risk analysis methods. Result on quantitative analysis shows that quantitative analysis is used frequently for risk analysis methods in insurance company given the mean value of 3.46 and chi-square of 36.100 with Asymp. Sig. of .000 which indicate a positive impact of quantitative analysis on risk analysis methods. Finally, use of computers and other modeling tools reveals that 10.0% respondent concluded that it was never used, 17.0% agreed that it is occasionally used, 15.0% said that it is frequently used, 15.0% also agreed that it is used very frequently, and 43.0% said that it is always used. It means that the respondents agreed that use of computers and other modeling tools is always used for risk analysis methods in insurance company given the mean value of 3.64 and chi-square of 34.400 with Asymp. Sig. of .000 which implies that use of computers and other modelling tools significantly contribute to risk analysis methods.

In the same vein, Table 3 presents risk analysis techniques, one of which is decision analysis. The result shows that the respondents agreed that decision analysis is always used in insurance company for risk analysis techniques given the mean value of 3.82 and chi-square of 44.900 with Asymp. Sig. of .000 which implies that decision analysis have significant impact on risk analysis techniques.

It also reveals that 13.0% respondents admitted that decision tree was never used, 11.0% respondents said that is occasionally used, 18.0% conclude that it is frequently used, while 36.0% agreed that it is used very frequently and 22.0% respondents said that it is always used. It therefore indicate that the respondents agreed with the fact that decision tree is used very frequently for risk analysis techniques in insurance company given the mean value of 3.43 and chi-square of 19.700 with Asymp. Sig. of .001 which implies that decision tree significantly drives risk analysis techniques. Result on probability analysis shows that respondents agreed that probability analysis is used frequently for risk analysis techniques in insurance company given the mean value of 3.70 and chi-square of 25.760 with Asymp. Sig. of .000 which indicate a positive impact of probability analysis on risk analysis techniques. Additional, sensitivity analysis was equally considered prominent by the respondents as risk analysis techniques given the mean value of 3.92 and chi-square of 21.280 with Asymp. Sig. of .000 which indicates a positive correlation between sensitivity analysis and risk analysis techniques.

Finally, institution/judgement/experience reveals that 4.0% respondents agreed that it was never used, 6.0% agreed that it was occasionally used, 22.0% said that it is frequently used, 30.0% also agreed that it is used very frequently, and 38.0% said that it is always used. It means that the respondents agreed that institution/judgement/experience was always used for risk analysis techniques in insurance company given the mean value of 3.92 and chi-square of 44.000 with Asymp. Sig. of .000 which implies that institution/judgement/experience significantly contribute to risk analysis techniques.

Table 3: Descriptive statistics on Risk Analysis Method and Risk Analysis Techniques

Risk Analysis Methods	Never	Occasionally	Frequently	Very frequently	Always	Mean Value	Chi-Square	Asymp. Sig.
	Frq (%)	Frq (%)	Frq (%)	Frq (%)	Frq (%)			
Qualitative analysis	2(2.0)	14(14.0)	28(28.0)	22(22.0)	34(34.0)	3.7200	31.200	.000
Semi-qualitative analysis	1(1.0)	15(15.0)	16(16.0)	44(44.0)	24(24.0)	3.7500	49.700	.000
Quantitative analysis	4(4.0)	13(13.0)	40(40.0)	19(19.0)	24(24.0)	3.4600	36.100	.000
Consulting experts	13(13.0)	10(10.0)	38(38.0)	20(20.0)	19(19.0)	3.2200	23.700	.000
Use of computers and other modeling tools	10(10.0)	17(17.0)	15(15.0)	15(15.0)	43(43.0)	3.6400	34.400	.000
Risk Analysis Techniques	**Never**	**Occasionally**	**Frequently**	**Very frequently**	**Always**	**Mean Value**	**Chi-Square**	**Asymp. Sig.**
	Frq (%)	**Frq (%)**	**Frq (%)**	**Frq (%)**	**Frq (%)**			
Decision analysis	5(5.0)	18(18.0)	7(7.0)	30(30.0)	40(40.0)	3.8200	44.900	.000
Decision tree	13(13.0)	11(11.0)	18(18.0)	36(36.0)	22(22.0)	3.4300	19.700	.001
Probability analysis	0	6(6.0)	40.(40.0)	32(32.0)	22(22.0)	3.7000	25.760	.000
Sensitivity analysis	0	6(6.0)	32(32.0)	26(26.0)	36(36.0)	3.9200	21.280	.000
Algorithm	4(4.0)	20(20.0)	30(30.0)	24(24.0)	22(22.0)	3.4000	18.800	.001
Risk premium	0	20(20.0)	20(20.0)	30(30.0	30(30.0)	3.7000	4.000	.261
Institution/judgment/experience	4(4.0)	6(6.0)	22(22.0)	30(30.0)	38(38.0)	3.9200	44.000	.000

Source: Field Survey, 2022

Table 4 presents risk response methods, one of which it tested avoid the risk. The result shows that the respondents agreed that avoid the risk was always used in insurance company for risk response methods given the mean value of 3.98 and chi-square of 49.600 with Asymp. Sig. of .000 which implies that avoid the risk have significant impact on risk response methods. It also reveals that prominent among the response methods of insurance is the reduction of risk the consequences shows that given the mean

value of 4.06 and chi-square of 58.900 with Asymp. Sig. of .000 which indicate a positive impact of reduce the consequences on risk response methods.

Transfer the risk results was also found to be always used in insurance company for risk response methods given the mean value of 3.55 and chi-square of 19.700 with Asymp. Sig. of .001 which indicates a positive correlation between transfer the risk and risk response methods.

Also, result on retain the risk reveals that the respondents agreed that transfer the risk is frequently used for risk response methods in insurance company given the mean value of 3.66 and chi-square of 30.70000 with Asymp. Sig. of .000 which means that transfer the risk has significant effect on risk response methods. Finally, insurance reveals that 3.0% respondents agreed that it was never used, 20.0% agreed that it was occasionally used, 18.0% said that it is frequently used, 25.0% also agreed that it is used very frequently, and 34.0% said that it is always used. It means that the respondents agreed that insurance is always used for risk response method in insurance company given the mean value of 3.67 and chi-square of 25.700 with Asymp. Sig. of .000 which implies that insurance significantly contribute to risk response methods.

Table 4: Descriptive statistics on Risk Response methods

	Never	**Occasionally**	**Frequently**	**Very frequently**	**Always**	**Mean Value**	**Chi-Square**	**Asymp. Sig.**
	Frq (%)	**Frq (%)**	**Frq (%)**	**Frq (%)**	**Frq (%)**			
Avoid the risk	2(2.0)	8(8.0)	22(22.0)	26(26.0)	42(42.0)	3.9800	49.600	.000
Reduce the likelihood of occurrence	0	2(2.0)	32(32.0)	44(44.0)	22(22.0)	3.8600	37.920	.000
Reduce the consequences	1(1.0)	4(4.0)	22(22.0)	34(334.0)	39(39.0)	4.0600	58.900	.000
Transfer the risk	4(4.0)	22(22.0)	18(18.0)	27(27.0)	29(29.0)	3.5500	19.700	.001
Retain the risk	1(1.0)	16(16.0)	24(24.0)	34(34.0)	25(25.0)	3.6600	30.700	.000
Contingencies	0	14(14.0)	22(22.0)	36(36.0)	28(28.0)	3.7800	10.400	.015
Insurance	3(3.0)	20(20.0)	18(18.0)	25(25.0)	34(34.0)	3.6700	25.700	.000

Source: Field Survey

Risk Monitoring Method

Table 5 presents risk monitoring methods, one of which is periodic document review. The result shows that periodic document review was always done in insurance company for risk monitoring methods given the mean value of 3.92 and chi-square of 14.160 with Asymp. Sig. of .003 which implies that periodic document review have significant impact

on risk monitoring methods. Furthermore, periodic risk status report was also considered as a task that is always carried out for risk monitoring methods in insurance company given the mean value of 3.68 and chi-square of 3.040 with Asymp. Sig. of .385 which means that periodic risk status report does not significantly affect risk monitoring methods.

Finally, periodic trend reporting reveals that 7.0% respondents agreed that it was never done, 20.0% agreed that it was occasionally done, 23.0% said that it was frequently done, 20.0% also agreed that it was done very frequently, and 30.0% said that it is always done. It means that the respondents agreed that periodic trend reporting is always done for risk monitoring method in insurance company given the mean value of 3.46 and chi-square of 13.900 with Asymp. Sig. of .008 which implies that periodic trend reporting does not significantly contribute to risk monitoring methods.

Table 5: Descriptive Statistics on Risk Monitoring Methods

Risk Monitoring Methods	Never	Occasionally	Frequently	Very frequently	Always	Mean Value	Chi-Square	Asymp. Sig.
	Frq (%)	Frq (%)	Frq (%)	Frq (%)	Frq (%)			
Periodic document review	0	13(13.0)	20(20.0)	29(29.0)	38(38.0)	3.9200	14.160	.003
Periodic risk status report	0	20(20.0)	24(24.0)	24(24.0)	32(32.0)	3.6800	3.040	.385
Periodic trend reporting	7(7.0)	20(20.0)	23(23.0)	20(20.0)	30(30.0)	3.4600	13.900	.008

Source: Field Survey, 2022

Influential Statistics: Regression Analysis

Effect of Risk recognition and analysis on the Performance of Insurance Company

The regression analysis was conducted to determine the relationship between dependent (performance of insurance company) against independent variables (risk monitoring, risk identification, risk description and risk analysis) and the Adjusted R Square is .973 therefore 97.3% of the variations in performance of insurance company is caused by the variations risk monitoring, risk identification, risk description and risk analysis as shown in the table below.

An ANOVA analysis was done between risk monitoring, risk identification, risk description and risk analysis and performance of insurance company at 95% confident level. The F critical was 890.927 and the p-value was .000 which is significant.

The table below shows that taking all factors into consideration, all other factors held constant performance of insurance company change by .959. The findings presented also showed that with all other variables held at zero, a unit change in risk identification would lead to an increase in performance of insurance company by .036. A unit change in

risk description would lead to an increase by .562 in performance of insurance company. Furthermore, a unit change in risk analysis would lead to n decrease in performance of insurance company by -.139 and finally, a unit change in risk monitoring would also lead to an increase by .337 in performance of insurance company and the table below shows that the two variables are significant at p<0.005.

Table 6a: Model Summary of Performance of Insurance Company and Co Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.987[a]	.974	.973	.15790	.974	890.927	4	95	.000

Source: Field Survey

Table 6b: ANOVA of Performance of Insurance Company and Co Factors

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88.854	4	22.213	890.927	.000[b]
	Residual	2.369	95	.025		
	Total	91.222	99			

Source: Field Survey

Table 6c: Coefficients of Performance of Insurance Company and Co Factors

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.959	.096		10.033	.000
	Risk Identification	.036	.099	.038	.362	.718
	Risk Description	.562	.140	.712	4.008	.000
	Risk Analysis	-.139	.160	-.159	-.872	.386
	Risk Monitoring	.337	.103	.398	3.261	.002

Source: Field Survey, 2022

Discussion of Findings

The findings of this study either affirm the previous studies that have been established in literature so far on Assessment of Adequate Risk Recognition among Nigeria Insurance Companies. The result of this study agrees with White (2005), who conducted an investigative study on "the management of property risks in Nigeria using a case study of the insurance sector and found that although risk management is consciously present in Nigeria insurance business, there still lacks a clear understanding of the discipline in the industry. However, other studies Wenk (2015) has noted that the involvement of risk

surveyors/managers by insurers was found not comprehensive enough. They were not involved in risk control and evaluation even after they had recommended appropriate risk control measures. It was found that although insurers have adequate information for any risk management activity, there lacks an efficient means of storage and retrieval of the same.

Conclusion and Recommendation

The study concluded that the Nigeria insurance industry is well fit and responsive to risk recognition which is their key roles for sustaining business growth in the country. The industry monitors the risks of their clients through adequate description, identification, analysis and monitoring and this has significantly contributed to the firms' performance and sustainability in the country. Arising from the finding of study, it is recommended that there is need for government to design and implement laws to promote effective risk monitoring practices that will be generally accepted and included in the code of conducts for insurance business operation in Nigeria.

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