

OPERATIONAL RISKS MANAGEMENT AND SYSTEMATIC INSURANCE PENETRATION: EVIDENCE FROM LAGOS METROPOLIS

¹Joshua S. Adeyele, ²Charity Maduchie, ³Ogorchukwu A. Isimoya,

¹Department of Actuarial Science, University of Jos, Jos, Nigeria

²Department of Marketing, Linkage Assurance Plc, Lagos, Nigeria

³Department of Actuarial Science and Insurance, University of Lagos, Lagos, Nigeria

Corresponding Author's email: adesolojosh@gmail.com



DOI: 10.29816/sjss.9.1.15

ABSTRACT

Effective operational risk management determines to a greater extent how the insurance companies can effectively handle claims reported to them by their policyholders. Failure of many insurance companies to respond promptly has affected their reputation as well as chance of penetration. This study examined various operational risks affecting claim handling among non-life insurance companies in Lagos metropolis. The population for this study comprised all insurance companies that deal with non-life business in Lagos State. Primary data were collected from marketing and underwriting departments of the selected insurance companies. A total of 121 copies of valid questionnaire were filled and returned. Nonparametric statistics was used to analyse the data collected. The study revealed that the selected insurance companies have very good claim handling techniques put in place as well as fairly good reserving to meet unexpected internal shocks. There is also evident of a very strong internal control system among non-life insurance companies as the records of policyholders are kept in safe and secured cabinet to check their risk exposures to business underwritten. The study also revealed that there is fairly good penetration rate among the selected insurance companies due to insurers' ability to win the existing policyholders to renew expired risks. In line with these findings, the study concludes that there is fairly good claims handling among the selected insurance companies which in turn fairly assist their penetration rate. The study recommends that insurance companies should avoid unnecessary cost that would otherwise affect the premiums they charge the insuring public by observing the principle of premium adequacy which is not too high and not too excessive in order to increase their penetration rate.

Keywords: operational risks, claim handling, reputational risk, insurance penetration

Introduction

The Nigerian insurance industry started its operation in 1921, and is older than those of China, India and Malaysia. Its regulation and control started in 1961, and has under gone indigenization in the 1970s as well as consolidation and recapitalization between

2005 and 2006. Following the recapitalisation and reconsolidation of the insurance industry in 2006, the numbers of insurance companies were brought to 69 in February 2007 from 103 while the five reinsurance companies were brought to 2 and as it stands as at 2013 in NIA

report, there are 69 insurance companies in Nigeria (including two reinsurance companies). These reforms programmes brought the insurance market in Nigeria to five (5) subsectors: traditional insurance; the pension; the health insurance; the distribution channels; and the support service providers.

All of these efforts are designed to strengthen the industry and make it more viable in order to achieve the mission and vision of Financial System Strategy, 2020 which is "to make the industry become the insurance market of first choice in Africa noted for high level of capacity, transparency, efficiency and safety and attain the 15th position in world insurance premium generation by the year 2020." With less than a year into 2020, insurance industry in Nigeria seems to be very far from achieving its mission and vision.

Many studies have acknowledged that insurance sector play significant role in economic development of any nation (Delavande, Rohwedder & Willis, 2008; Jappelli & Padula, 2011; Adeyele & Maiturare, 2012; Lusardi & Mitchell, 2013), yet the Nigerian insurance industry's contribution to Gross Domestic Product is 0.035% which is far below expectation as number 65 position in world insurance ranking and number 6 out of 8 leading insurance markets in Africa in 2007. KPMG (2014) puts the insurance penetration rate at 0.3% with a population of 198 million compared to South Africa whose penetration is 14.2% with a population of 53.2 million. Undoubtedly, penetration rate of the insurance sector remains significantly very low at 0.3 percent, which is lower than the average of 3.8 percent in Africa (Cytonn Investment, 2015).

In attempt to solve low insurance penetration in Nigeria, various studies on factors responsible for this have been identified. Although, most of these studies on low insurance penetration rate have not been able

to empirically show the interaction between operational risks and claim handling techniques. It is assumed that effective claim handling technique by insurance companies will enhance their good image in the country. This invariably implies that good reputation will lead to increase in insurance penetration rate.

The manner in which this claim is handled when reported to insurers determine both insurers reputation and penetration rate. In many studies carried out in respect of insurance low penetration, few studies noted that failure of insurance companies to pay claim make many Nigerians not to accept insurance business but rather perceived it as fraud business legalized to dupe unsuspecting members of the public (Adeyele, 2011; Adeyele & Maiturare, 2012).

Also, there has not been any empirical evidence on how effective claim handling technique influences insurance companies' reputation. Apart from dishonesty of some insurance companies to honour valid claims, there are crucial factors that could hinder them from paying valid claims as they fall due. The link between insurance reputational risk and claim handling techniques has not also been established by many empirical studies. All of these issues requires systematic academic research to solve the existing problem affecting insurance penetration in Nigeria. Consequently, the present study attempts to fill these important gaps left uncovered by existing studies in insurance literature by examining how operational risk management relates to insurance penetration in selected insurance companies in Lagos Metropolis. The rest of the paper is organized as follow: Section two deals with literature review while sections three and four of the paper are concerned with methodology and results respectively. The last section is concerned with conclusion and recommendation.

2.0 Literature Review

The term of operational risk appeared in the 1990s, in banking sector. This term arose due to many errors that led to huge losses and scandals in November, 2008. Later, the term was extended to the insurance industry. In recent years, attention has been paid to this type of risk, especially due to the numerous events that led to financial losses resulting from conducting operations in the wrong way, and the desire to increase shareholder role and last due to closer monitoring by financial authorities of this type of risk (Martin & Hayes, 2013).

Operational risk forms part of one of the six risk categories in the Prudential Sourcebook (PSB) of the United Kingdom's Financial Services Authority (FSA) (Integrated Prudential Sourcebook, 2012) and it is becoming an important issue in the boardroom (Martin & Hayes, 2013). Whilst operational losses are usually of the high-frequency-low-severity type, there is the potential for extreme losses to occur and thus operational risk cannot be ignored (Embrechts, Furrer & Kaufmann, 2003 cited in Martin & Hayes, 2013). Management practices for operational risk that extend beyond a mere formula based calculation or model are vital (Lam, 2003). Operational risk play significant role among determinants of risks that confront insurance companies' survival. Among the prominent risks associated with operational risks in Nigerian insurance companies included risk underwriting, system control, burden of regulation and management expenses. All of these risks need to be carefully managed order to mitigate their impact on insurance solvency.

The Basel committee on banking supervision (2001) defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events. This definition includes legal risk, but excludes strategic and

reputational risk (Martin & Hayes, 2013). It was not long ago when the measurement and management of operational risk was first introduced in Basel II as a reaction of preventing the potential failure of banks due to operational errors as happened in Barings and Daiwa (Power, 2005). This study adopts the definition of the Basel Committee which is the possibility of incurring losses or reaching the estimated profits, arising from inadequate internal processes, employees fault or errors generated by the computer system and the external factors. The most obvious source of information on which an insurer may base its operational-risk assessment is its own previous operational-loss experience (Martin & Hayes, 2013).

The central function of any insurance company is its ability to manage risk across different participants (Merton, 2005). Saunders and Cornett (2008) noted that modern insurance companies are in the risk management business. This implies that risks management should take the centre stage in the operations of insurance companies (Chipa1 & Wamiori, 2017). The efficiency of risk management by insurance companies will generally influence their financial performance (Chipa & Wamiori, 2017).

Generally, company's operations are prone to risks and if the risks are not managed the firm's financial performance will be at stake. There is however, no specific model to determine the balance between risks with greatest probability and those with lower loss, making risk management difficult (Chipal & Wamiori, 2017). Operational risk has always been present, but in the last 20 years, with rapid changes in the financial industry leading to larger and more complex financial institutions, a widespread concern has grown significantly (Suleyman & Andrea 2015). Stulz (1984, 1990) notes that firms intend to maximise hedging until the variance of the investment portfolio (i.e., risk) is minimised;

whereas, managers trading in hedging contracts individually, face significant costs (Froot, Scharfstein & Stein, 1993).

According to Hernandez and Martinez (2012), operational risk is not a new risk; in fact, it is the first risk that an insurer has to manage, even before signing the first insurance policy. However, the idea that operational risk management is a discipline with its own organizational structure, tools and processes, like credit or market risks, is new and has evolved considerably lately (Hernandez & Martinez, 2012).

Over the time, this operational risk concept was extended to the credit risk management practice, where the managers in banks' credit division raise concerns on the integrity of settlement systems. Moreover, operational risk is treated as a left-over category from the core banking risks. However, strategic risk and reputational risk were not included in the operational risk category in Basel definition mainly due to avoid the complexity associated with understanding and quantifying these risks (Acharyya, n.d).

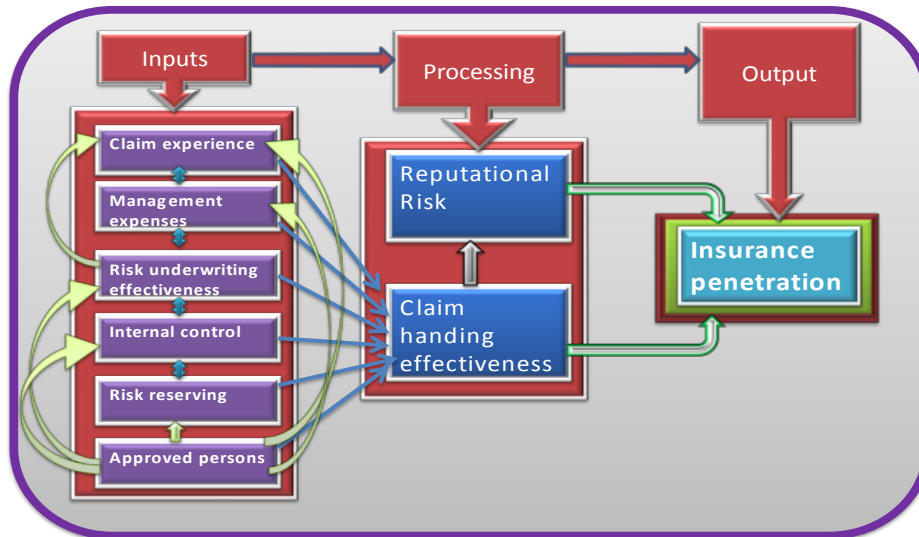
Consequently, the evolution of the operational risk management as a management function is a regulatory driven approach which binds managers to compute the level of risk capital for this left-over category of risks that a bank face. Scandizzo (2005) provided a systematic method for mapping operational risk in the process of its management (i.e., identification, assessment, monitoring/reporting and control/mitigation). The author observed that operational failures are created from risk drivers, such as people, process, technology and external agents, and he linked them to consequent financial losses by using key risk indicators that are the ultimate challenge for operational risk management.

Theoretically, effective operational risk management usually includes adequate reserving technique, trained personnel and less expense in premium underwriting of risks. This enables insurers to pay claims as and when due. Many factors contribute to the inherent uncertainty in estimating loss reserves, and most of them are correlated with the tail. According to Penalva (2010), these factors include:

changes in the inflation rate for goods and services related to covered damages such as medical care and home repair costs; changes in the judicial interpretation of policy provisions relating to the determination of coverage; changes in the general attitude of juries in the determination of liability and damages; legislative actions; changes in the medical condition of claimants; changes in the estimates of the number and/or severity of claims that have been incurred but not reported as of the date of the financial statements; and changes in the claim handling procedures.

All of these factors link to claim handling techniques. An analysis of literature suggests that the theoretical foundation of operational risk emanated from the field of strategic management research (Acharyya, n.d). Although there is insufficient academic literature that explicitly gives theoretical foundation of operational risk, there are considerable works of strategists that can be utilised to establish a conceptual framework of operational risk for financial firms. In a theoretical paper, Wiseman and Catanach (1997) discussed several organizational and behavioural theories, such as agency theory and prospect theory, which influence managerial risk-taking attitudes. They found that, within the variety of relations among risk choices, managers exhibit simultaneous low and high-risk preferences.

Figure 2.1: Relationship between operational risk management and insurance penetration



Source: Authors' conceptual Framework, 2019

Conceptually, as can be seen in Figure 2.1, the heart of insurance survival depends on the speed of treatment of claims reported by the policyholders. Empirically, Nelson (2000) finds that the understatement of loss reserves relative to the subsequent leads to delay claim in payments period. Many insurers are however, found to be motivated to understate the loss reserve, in some cases they may be motivated to overstate it, either with the sole aim to reduces income tax payments to authority (Gaver & Paterson 1999), to justify high premium rates (Penalva 1998, Nelson 2000), or to signal high accounting quality. In most case, Penalva (2010) notes that incentives to understate the reserve are likely to be stronger than any motivation to overstate it.

Quick response to claim investigation and payment of valid claims by insurance companies influence their reputation. Any adverse effect in claim handling processes will directly affect the insurance business survival negatively. Hence, the need to pay attention to operational risks determinants for effective

claim handling techniques. Increase in operational risks reduces the effectiveness of claim handling. Poor handling of claim serves as impediment to insurance companies' penetration. Low penetration rate reduces the profitability of insurance companies. Consequently, to remain profitable, insurance companies need to carefully manage how claims are handled since this is the point at which the quality of insurance products can be tested.

3.0 Data and Method

The population for this study comprised all insurance companies that deals with non-life business in Lagos State. The population of non-life insurance companies is changing everyday as new ones are given license to operate. As a result, a purposive sampling technique was used to select 12 non-life insurance companies. A primary data such as questionnaire backup with interviews were sourced from marketing and underwriting departments of the selected insurance companies. The copies of questionnaire were

distributed to staff members of the insurance companies. Twelve copies of questionnaire were administered to each insurance company on 24th September 2018 and were retrieved from the respondents on 30th November 2018. This is to enable the selected companies to have enough time to go through the questionnaire. All the questions items in the questionnaire are based on operational risks and claims handling impact on insurance penetration. Out of 144 copies of questionnaire distributed to selected

insurance companies, 121 copies were filled and returned and are valid for this study.

4.0 Results

This section deals with descriptive interpretation of data collected for the study including claims handling techniques, reserves system, internal control, management expenses, risk underwriting, Approved Persons (APER), reputational risk, insurance penetration strategy, and claim experience of of non-life insurance companies in Lagos metropolis.

Table 1: Claims handling techniques in selected insurance companies

CODES	Criteria for claims handling techniques	N	Mean	Std. Deviation	Minimum	Maximum	Coeff. Of Var	Monte Carlo Sig.
CHDLNGT1	Your company's claim department is as accessible as possible for the claimant.	121	5.8264	1.53665	1.00	7.00	0.26374	.000 ^m
CHDLNGT2	On receipt of claim, company immediately contacts the policyholder.	121	5.6364	1.16905	1.00	7.00	0.20741	.000 ^m
CHDLNGT3	If the claim cannot be settled rapidly, your company notifies the claimant and indicates that he will be re-contacted within a reasonable time limit	121	5.2314	1.28945	1.00	7.00	0.24648	.000 ^m
CHDLNGT4	If it appears that the claim is not covered by the insurance policy, your company sends a notification as soon as possible to the claimant, explaining why it is not covered.	121	5.7438	1.24853	1.00	7.00	0.21737	.000 ^m
	CHDLNGT	121	5.6095	1.03526	2.00	7.00	0.18455	.000 ^m

Source: Authors' Computation, 2019.

Table 1 shows the claim handling techniques employed by non-life insurance companies in Lagos metropolis. In all of the four criteria used for the assessment, there are respondents who extremely disagreed with them as well as those who extremely agreed with all of them. As regard first and second

criteria, many respondents strongly agreed that their companies' claim departments are accessible to the claimants (CHDLNGT1: mean/std dev. = 5.8264/1.53665, Coeff. of Var = 0.26374, $p < 0.05$) and on the receipt of claim, the insurance companies immediately contact the policyholders (CHDLNGT2:

mean/std dev. = 5.6364/1.16905, Coeff. of Var = 0.20741, $p < 0.05$). Similarly, many respondents agreed that if the claim cannot be settled rapidly, their respective companies notify the claimants and indicate that they would be re-contacted within a reasonable time limit (CHDLNGT3: mean/std dev. = 5.2314/1.28945, Coeff. of Var = 0.24648, $p < 0.05$). They also agreed that if it appears that the claim is not covered by the insurance policy, their respective companies send a notification as soon as possible to the claimants, explaining why the loss in which claim is being sought is not covered (CHDLNGT4: mean/std dev. = 5.7438/1.24853, Coeff. of Var = 0.21737, $p < 0.05$). All of these

responses to the criteria are significant and agreed with overall weight of measurement for purpose of assessing how claims are being handled among the selected insurance companies (CHDLNGT5: mean/std dev. = 5.6095/1.03526, Coeff. of Var = 0.18455, $p < 0.05$). Using the scale of 1 to 7, it can be concluded that on receipt of claim, insurance companies immediately contact the policyholders. Judging from this scale of 1 to 7, it can be said that the selected non-life insurance companies have good claim handling techniques. Table 2 shows the reserving techniques of non-life insurance companies in Lagos metropolis.

Table 2: Reserves system in selected insurance companies

CODES	Criteria for claims handling techniques	N	Mean	Std. Deviation	Minimum	Maximum	Coeff. Of Var	Monte Carlo Sig.
RESERV1	The percentage of premium written put in reserve is greater than minimum amount required by regulatory body.	121	5.2810	1.62390	1.00	7.00	0.3075	.000 ^m
RESERV2	Unexpected shocks due to miss-selling can be survived.	121	5.2893	1.26120	2.00	7.00	0.23845	.000 ^m
RESERV3	Amount in reserves can meet the expectations of policyholders.	121	5.6116	1.31891	1.00	7.00	0.23503	.000 ^m
RESERV4	Funds set aside to provide external shocks and events are adequate	121	5.4298	1.31546	1.00	7.00	0.24227	.000 ^m
RESERV5	Funds put in reserve for each policy account is greater than regulatory requirement to provide greater resources for internal shocks and events.	121	5.2975	1.41212	1.00	7.00	0.26656	.000 ^m
	RESERV	121	5.3818	1.08812	2.40	7.00	0.20218	.000 ^m

Source: Authors' Computation, 2019.

From the scale of measurement (Table 2), with the exception of RESERV2 whose least scale is 2, others' is 1 (extremely disagreed) while the most is 7 for all criteria (extremely agreed). Many respondents agreed that the percentage of premium written put in reserve is greater than minimum amount required by regulatory body (RESERV1: mean/std dev. = 5.2810/1.62390, Coeff. of Var = 0.3075, $p < 0.05$) and that unexpected shocks due to miss-selling can be survived (RESERV2: mean/std dev. = 5.2893/1.26120, Coeff. of Var = 0.23845, $p < 0.05$). Also, many respondent within the range of 1 to 7 measure of agreement strongly agreed that the amount in reserves can meet the expectations of policyholders (RESERV3: mean/std dev. = 5.6116/1.31891, Coeff. of Var = 0.23503, $p < 0.05$) as the funds set aside to provide external shocks and events are adequate

(RESERV4: mean/std dev. = 5.4298/1.31546, Coeff. of Var = 0.24227, $p < 0.05$). Similarly, many respondent agreed that the funds put in reserve for each policy account is greater than regulatory requirement to provide greater resources for internal shocks and events (RESERV5: mean/std dev. = 5.2975/1.41212, Coeff. of Var = 0.26656, $p < 0.05$). In all of these criteria, the most reliable of all is third criterion (RESERV3) which signifies that the amount in reserves can meet the expectations of policyholders. Meanwhile the overall level of assessment for reserves of non-life is 1 unit scale away from the average which implies a fairly good level of reserves are in place for claim purposes (RESERV: mean/std dev. = 5.3818/1.08812, Coeff. of Var = 0.20218, $p < 0.05$). Table 3 is all about internal control system put in place in order to curtail excessive risk in their portfolio.

Table 3: Internal control in selected insurance companies

CODES	Criteria for claims handling techniques	N	Mean	Std. Deviation	Minimum	Maximum	Coeff. Of Var	Monte Carlo Sig.
INTERCTR1	Records of policyholders are kept in safe and secured cabinet	121	5.9752	1.41694	1.00	7.00	0.23714	.000 ^m
INTERCTR2	There is adequate backup for vital information of the policy holders.	121	6.0331	1.33500	1.00	7.00	0.22128	.000 ^m
INTERCTR3	There is strong underwriting department to check adequacy of the sum insured	121	5.8099	1.36817	1.00	7.00	0.23549	.000 ^m
INTERCTR4	Services of loss adjusters are sought to handle large losses on policy accounts.	121	6.0579	1.24698	2.00	7.00	0.20585	.000 ^m
INTERCTR5	Businesses with high profile of risk are mostly declined by our company	121	4.9091	1.90613	1.00	7.00	0.38829	.000 ^m
	INTERCTR	121	5.7570	.92492	2.00	7.00	0.16066	.000 ^m

Source: Authors' Computation, 2019.

In Table 3, the least level of agreement is 1 (extremely disagreed) for criteria INTERCTR1 to INTERCTR4 but 2 (strongly disagreed) for INTERCTR5 while the most for all criteria is 7 (extremely agreed). Based on the weight of measurement, many respondents strongly agreed that records of policyholders are kept in safe and secured cabinet (INTERCTR1: mean/std dev. = 5.9752/1.41694, Coeff. of Var = 0.23714, $p < 0.05$); and that there is adequate backup for vital information of the policyholders (INTERCTR2: mean/std dev. = 6.0331/1.33500, Coeff. of Var = 0.22128, $p < 0.05$). In addition, many respondents strongly agreed that there is strong underwriting department to check adequacy of the sum insured (INTERCTR3: mean/std dev. =

5.8099/1.36817, Coeff. of Var = 0.23549, $p < 0.05$) as well as hiring of the service of loss adjusters to handle large losses on policy accounts (INTERCTR4: mean/std dev. = 6.0579/1.24698, Coeff. of Var = 0.20585, $p < 0.05$). However, many respondents agreed that businesses with high profile of risks are mostly declined by their companies (INTERCTR5: mean/std dev. = 4.9091/1.90613, Coeff. of Var = 0.38829, $p < 0.05$). The overall weight of agreement implies that there is a very strong internal control system by non-life insurance companies to check their risk exposures to business underwritten (INTERCTR: mean/std dev. = 5.7570/0.92492, Coeff. of Var = 0.16066, $p < 0.05$). Table 4 reveals the management expenses of non-life insurance companies.

Table 4: Management expenses in selected insurance companies

CODES	Criteria for claims handling techniques	N	Mean	Std. Deviation	Minimum	Maximum	Coeff. Of Var	Monte Carlo Sig.
MGTEXP1	Lack of proper management of operational risk leads to high management expenses.	121	5.2231	1.56784	1.00	7.00	0.30017	.000 ^m
MGTEXP2	Underwriting cost of new business is very expensive	121	4.9174	1.56305	1.00	7.00	0.31786	.000 ^m
MGTEXP3	Renewal and maintaining insurance accounts are very expensive.	121	4.4215	1.55859	1.00	7.00	0.3525	.000 ^m
MGTEXP4	Management expenses increase operational risk losses of our company.	121	4.7273	1.38444	1.00	7.00	0.29286	.000 ^m
MGTEXP5	Commission to agents and brokers are on a high side.	121	4.7355	1.43043	1.00	7.00	0.30206	.000 ^m
	MGTEXP	121	4.8050	1.07346	1.40	7.00	0.22341	.000 ^m

Source: Authors' Computation, 2019.

One of the areas of operational risk affecting insurance companies negatively is management expenses whereby some Executive Directors of insurance companies deliberately increase the figure for management expenses with the purpose of

deceiving the regulators and government to reduce tax payment. The least level of agreement for all criteria is 1 (extremely disagreed) while the most for all criteria is 7 (extremely agreed) (Table 4). From the information contained in the table, many

respondents agreed that lack of proper management of operational risk leads to high management expenses (MGTEXP1: mean/std dev. = 5.2231/1.56784, Coeff. of Var = 0.30017, $p < 0.05$); and that underwriting cost of new business is very expensive (MGTEXP2: mean/std dev. = 4.9174/1.56305, Coeff. of Var = 0.31786, $p < 0.05$). However, many respondents are indifferent to whether renewal and maintaining insurance accounts are very expensive (MGTEXP3: mean/std dev. = 4.4215/1.55859, Coeff. of Var = 0.3525, $p < 0.05$). Meanwhile many of them agreed that management expenses increase operational risk losses of their companies (MGTEXP4: mean/std dev. = 4.7273/1.38444, Coeff. of Var = 0.29286, $p < 0.05$) as well as agreed that

commission to agents and brokers are on a high side (MGTEXP5: mean/std dev. = 4.7355/1.43043, Coeff. of Var = 0.30206, $p < 0.05$). The weight of the overall agreement is 1 scale level away from the average (MGTEXP: mean/std dev. 4.8050/1.07346, Coeff. of Var = 0.22341, $p < 0.05$), which shows a very poor management expenses of insurance companies. For instance, if the weight of agreement falls below 4 unit level on a scale of 7 implies good expenses management. The inverse of the overall mean average is implied for the purpose of decision making in respect of management expenses. Table 5 is concerned with risk pricing of non-life insurance companies in Lagos metropolis.

Table 5: Risk underwriting of non-life insurance companies in Lagos metropolis

CODES	Criteria for claims handling techniques	N	Mean	Std. Deviation	Minimum	Maximum	Coeff. Of Var	Monte Carlo Sig.
RISKPRI1	The task of risk identification is give proper priority in risk pricing.	121	5.5868	1.33335	2.00	7.00	0.23866	.000 ^m
RISKPRI2	The risk underwriter are open minded when it comes to risk assessment	121	5.7769	1.24156	1.00	7.00	0.21492	.000 ^m
RISKPRI3	Risk identification is a continues one	121	5.6860	1.33562	1.00	7.00	0.2349	.000 ^m
RISKPRI4	Efficient record keeping is an important part of risk identification in our company.	121	5.7851	1.31153	2.00	7.00	0.22671	.000 ^m
	RISKPRI	121	5.7087	1.08510	2.00	7.00	0.19008	.000 ^m

Source: Authors' Computation, 2019.

Many respondents in Table 5 strongly agreed that the task of risk identification is given proper priority in risk pricing (RISKPRI1: mean/std dev. = 5.5868/1.33335, Coeff. of Var = 0.23866, $p < 0.05$) and that the risk underwriter are open minded when it comes to risk assessment (RISKPRI2: mean/std dev. = 5.7769/1.24156, Coeff. of Var = 0.21492, $p < 0.05$). Also in the third and fourth criteria,

many respondents agreed that risk identification is a continued process (RISKPRI3: mean/std dev. = 5.6860/1.33562, Coeff. of Var = 0.2349, $p < 0.05$), and efficient record keeping is an important part of risk identification in their respective companies (RISKPRI4: mean/std dev. = 5.7851/1.31153, Coeff. of Var = 0.22671, $p < 0.05$). The overall weight of the four criteria indicates a very

good risk pricing techniques among non-life insurance companies (RISKPRI: mean/std dev. = 5.7087/1.08510, Coeff. of Var = 0.19008, $p < 0.05$). Table 6 shows the description of

personnel of in the hem of affair in non-life insurance companies.

Table 6: Approved persons (Skilled personnel) in selected insurance companies

CODES	Criteria for claims handling techniques	N	Mean	Std. Deviation	Minimum	Maximum	Coeff. Of Var	Monte Carlo Sig.
SKPERNEL1	All employees remain competent for the work they do.	121	5.7686	1.39499	1.00	7.00	0.24183	.000 ^m
SKPERNEL2	Employees are appropriately supervised	121	5.5702	1.44237	1.00	7.00	0.25894	.000 ^m
SKPERNEL3	50 percent of underwriters are professional	121	5.8843	1.35518	1.00	7.00	0.2303	.000 ^m
SKPERNEL4	High quality personnel lead to high profit margin.	121	5.4132	1.53117	1.00	7.00	0.28286	.000 ^m
	SKPERNEL	121	5.6591	1.03682	2.25	7.00	0.18321	.000m

Source: Authors' Computation, 2019.

In Table 6, the least level of agreement for all the criteria is 1 (extremely disagreed) while the most for all is 7 (extremely agreed). From the table, many respondents strongly agreed that all employees remain competent for the work they do (SKPERNEL1: mean/std dev. = 5.7686/1.39499, Coeff. of Var = 0.24183, $p < 0.05$), and that they are appropriately supervised (SKPERNEL2: mean/std dev. = 5.5702/1.44237, Coeff. of Var = 0.25894, $p < 0.05$). Many respondents also agreed that about 50% of underwriters are professionals (SKPERNEL3: mean/std dev. = 5.8843/1.35518, Coeff. of Var = 0.2303, $p < 0.05$) while many of

the respondents agreed that high quality personnel leads to high profit margin in their respective companies (SKPERNEL4: mean/std dev. = 5.4132/1.53117, Coeff. of Var = 0.28286, $p < 0.05$). The overall weight of agreement indicates that the profile of staff skills is 2 units up away from the average which implies that non-life insurance companies have very qualified staff (SKPERNEL: mean/std dev. = 5.6591/1.03682, Coeff. of Var = 0.18321, $p < 0.05$). Table 7 reveals the insurance penetration in Lagos metropolis.

Table 7: Insurance penetration strategy in selected insurance companies

CODES	Criteria for claims handling techniques	N	Mean	Std. Deviation	Minimum	Maximum	Coeff. Of Var	Monte Carlo Sig.
INSPENET1	The rate of insurance market share of our company is increasing yearly	121	5.3058	1.62195	1.00	7.00	0.30569	.000 ^m
INSPENET2	Most of our policyholders with expired risk do renew their expired policies.	121	5.0661	1.45336	1.00	7.00	0.28688	.000 ^m
INSPENET3	We do not have problem in getting new customers to insure with our company	121	5.2314	1.37089	1.00	7.00	0.26205	.000 ^m
INSPENET4	The premiums charged for class of insurance risks are adequate.	121	4.8843	1.38558	1.00	7.00	0.28368	.000 ^m
INSPENET5	Our company do not usually experience heavy claim that will otherwise affect penetration rate.	121	4.5455	1.50555	1.00	7.00	0.33122	.000 ^m
	INSPENET	121	5.0066	1.11353	1.40	7.00	0.22241	.000 ^m

Source: Authors' Computation, 2019.

The range of agreement in Table 7 is within 1 to 7 in which selection were made for all the five criteria. As can be seen in the table, many respondents agreed that the rate of insurance market shares of their companies are increasing yearly (INSPENET1: mean/std dev. = 5.3058/1.62195, Coeff. of Var = 0.30569, $p < 0.05$) and that most of their policyholders with expired risk do renew their expired policies (INSPENET2: mean/std dev. = 5.0661/1.45336, Coeff. of Var = 0.28688, $p < 0.05$). They also reported that they do not have problem in getting new customers to insure with their companies (INSPENET3: mean/std dev. = 5.2314/1.37089, Coeff. of Var = 0.26205, $p < 0.05$) and that premiums charged for class of insurance risks are adequate (INSPENET4: mean/std dev. = 4.8843/1.38558, Coeff. of Var =

0.28368, $p < 0.05$). Finally on this, many respondents agreed that their companies do not usually experience heavy claims that will otherwise affect penetration rate (INSPENET5: mean/std dev. = 4.5455/1.50555, Coeff. of Var = 0.33122, $p < 0.05$). All the criteria yielded 5 point as the overall weight and are significant (INSPENET: mean/std dev. = 5.0066/1.11353, Coeff. of Var = 0.22241, $p < 0.05$). This means that the extent of insurance penetration is fairly good among the selected insurance companies

5.0 Conclusion

Effective operational risk management determines to a greater extent how insurance companies can effectively handle claims reported to them by their policyholders.

Failure of many insurance companies to respond promptly has affected their reputation as well as chance of penetration. However, any claims to be paid must be valid and not fraudulent. In order to curb the growth of fraudulent claims, every insurer is expected to establish systems and controls for detecting and identifying fraud appropriate to their exposures and vulnerability so as to discourage fraudulent practices by making the claimant aware of the consequences of submitting false statements in the claims filing phase. To this end, the insurers need to place a notification on their claim forms referring to the consequences of lodging fraudulent claims.

Adequate training of staff for them to be fit for the job they do is very important so that those responsible for claims investigation will be able to scrutinize claim documents in order to detect falsehood and possible fraud, and where in the opinion of the insurer any claim lodged is fraudulent the insurer's internal control will enable them to apply and exhaust its internal mechanisms for detecting, identifying and verifying the fraud. This study considers all of these by examining various operational risks affecting claim handling among non-life insurance companies in Lagos metropolis. The study revealed that:

- The selected insurance companies have very good claim handling techniques put in place as the reserves maintained by them are fairly good to meet unexpected internal shocks and events emanating from miss-selling.
- There is also evident of a very strong internal control system among non-life insurance companies as the records of policyholders are kept in safe and secured cabinet and as well adequately backup to check their risk exposures to business underwritten.
- Meanwhile, the study revealed that there is significant poor management expense among the selected insurance companies

as many of them on the average agreed that lack of proper management of operational risk leads to high management expenses as high commission are paid to agents and brokers.

- In terms of risk pricing, it was found that there is a very good risk pricing techniques among non-life insurance companies as the task of risk identification is given proper priority in risk pricing and that the risk underwriters are open minded when it comes to risk assessment. This may not be unconnected with very good staffing as those in the hem of affair remain competent for the work they do, and appropriately supervised.
- There is fairly good penetration rate among the selected insurance companies as many agreed that the rate of insurance market share for their respective companies increasing yearly and most of their policyholders with expired risk do renew their expired policies.
- The study also shows that non-life insurance companies do not have problem in getting new customers to insure with their companies as they charge adequate premiums and they do not usually experience heavy claim that will otherwise affect premium charged.

On the foregoing, this study recommends that there is a need for management of the selected insurance companies to pay adequate attention to expenses incurred in course of underwriting policies. They need to be conscious that high premiums is one of the factors that limit the insurance penetration as many insuring public will not be willing to pay high premium. Hence, they should avoid unnecessary cost that would otherwise affect the premiums they charge the insuring public by observing the principle of premium adequacy which is neither too high nor too excessive.

References

- Acharyya, M. (n.d) Why the current practice of operational risk management in insurance is fundamentally flawed - evidence from the field
- Adeyele, J.S. & Maiturare, M.N. (2012). Repositioning the Nigerian Insurance Industry for Sustainable Development. *European Journal of Business and Management*, 4(5), 22-30.
- Jappelli, Adeyele, J.S. (2011). Economic Liberation of Insurance Industry in Nigeria. *International Journal of Research in Management Science*. 3(5), 113 – 118.
- Basel Committee on Banking Supervision (BCBS) (2006). Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework—Comprehensive Version. Available online: <http://www.bis.org/publ/bcbs128.htm> (accessed on 24 Dec 2016)
- Chipa, E.M and Wamiozi, G. (2017). Effects of risk management on financial performance of insurance companies in Mombasa Country, Kenya *Imperial Journal Of Interdisciplinary Research* 3(5), 259-282
- Delavande, A., Rohwedder, S. & Willis, R. (2008). Preparation for retirement, financial knowledge and cognitive resources. *MRRRC Working Paper Series* 190.
- Froot, K. A., Scharfstein, D. S., Stein, J. C. (1993). Risk management: coordinating corporate investment and financing policies. *Journal of Finance*, 48(5), 1629-1658
- Gaver, J., & Paterson, J. (1999). Managing insurance company financial statements to meet regulatory and financial statement goals. *Contemporary Accounting Research*, 16(2), 207-241.
- Hernandez, B. 11., & Martinez, T. -E. M. (2012). Capital Assessment of Operational risk for the Solvency of Health Insurance Companies. *The Journal of Operational Risk*, 7(2), 43-65.
- Integrated Prudential Sourcebook (2004). Financial Services Authority. http://www.fsa.gov.uk/pubs/policy/ps04_16.pdf, 28/05/2012
- Lam, J., (2003). *Enterprise risk management: From incentives to controls*. John Wiley & Sons, Inc., Hoboken, New Jersey.
- Lusardi, A., Michaud, P.-C. & Mitchell, O.S. (2013). Optimal Financial literacy and wealth inequality. *NBER Working Paper* 18669
- Merton, R.C. (2005). A functional perspective of financial intermediation, *Financial Management Journal*, 24 (2), 23-41.
- Martin, M. & Hayes, M. (2013) Operational risk management: Practical implications for the South African insurance industry Presented at the Actuarial Society of South Africa's 2013 Convention 31 October–1 November 2013, Sandton Convention Centre
- Penalva, F. (1998). Loss reserves and accounting discretion in the property-casualty insurance industry. Working paper, University of California at Berkeley.
- Penalva, D. (2010). Analysis and valuation of insurance companies. Columbia Business School, Center for Excellence in Accounting and Security Analysis. Available at: <http://www.columbia.edu/~dn75/Analysis%20and%20Valuation%20of%20Insurance%20Companies%20-%20Final.pdf>
- Power, M. (2005). The invention of operational risk. *Review of International Political Economy*, 12(4): 577-599
- Stulz, R. M. (1984). Optimal hedging policies. *Journal of Financial and Quantitative Analysis*, 19(2), 127-140.
- Saunders, A. & Cornett, M.M. (2008). *Financial Institutions Management: A Risk Management Approach*, McGraw-Hill, Irwin. 54
- Scandizzo, S. (2005). Risk mapping and key risk indicators in operational risk management.
- Stulz, R. M. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics*, 26(1), 3-27.
- Suleyman Basak & Andrea M. Buffa (2015). A theory of operational risk
- Tullio, & Mario Padula. (2011). Investment in financial knowledge and saving decisions. *CSEF Working Paper* 272, University of Salerno.
- Wiseman, R. M. & Catanach, A. H., Jr. (1997), A longitudinal disaggregation of operational risk under changing regulations: evidence from the saving and loan industry. *The Academy of Management Journal*, 40(4), 799-830.