OPERATIONAL RISK MANAGEMENT IN NIGERIAN INSURANCE INDUSTRY – AN ASSESSMENT

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Abstract

The focus of the paper was to explore current practices of operational risk management in the Nigerian Insurance Industry. This is important due to the surprising burst of financial issues that have caused significant operational losses in recent times and the call by the regulatory body towards risk-based supervision. Sample population was the insurance companies in Nigeria. Stratified sampling was utilized in selecting the sample size. The author empirically examines this by use of descriptive statistics such as means and standard deviations. The results confirmed the fact that insurance companies in Nigeria have somewhat adopted a formal process of operational risk which serves as a basis for a detailed operational risk management framework. It provided a background on the awareness and the importance of operational risk management in the Nigerian insurance industry. The findings have major implications to the financial sectors and regulatory agencies in Nigeria.

Keywords: Operational risk, operational risk management, insurance companies, developing countries

1. INTRODUCTION

Operational risk is becoming an important issue in the management of financial organizations. This is because of the sudden and surprising burst of financial issues that caused significant operational losses (Hemrit and Ben Arab, 2012). According to Acharyya (2012) the insurance industry, like all other financial institutions, should be moving towards a greater appreciation of the risks facing both individual companies and the industry as a whole.

The great expanse of literature on the subject of operational risk and its management is more skewed to the banking industry (Martin and Hayes, 2013). In recent times, notably, that operational risk in the insurance industry is being recognized as being as important (Wei, 2003). Cormac, Webb, Cheevers, Ring, and Clark, (2016) thus opine that in view of this, the experience of operational risk management and compliance issues encountered in the banking sector can be used a guide towards facilitating operational risk management and compliance in the insurance industry. Martins and Hayes (2013 p.49) observed that, "in general, insurance companies are noted to be behind the banking industry when it comes to the management of operational risk in both developed and developing countries".
Solvency II, a directive which harmonizes insurance regulation defines

operational risk as "any risk of direct or indirect loss incurred from inadequate or failed internal processes, people and systems, or from external events. It includes business risk, compliance risk, expense risk, legal risk, management risk, model risk, reputational risk and strategic risk" (Doff, 2007).

In Nigeria, a developing nation, formal risk management is at its infantile stage which thus reflects on operational risk management. However in keeping up with worldwide trend, operational risk management has started to feature in the financial institutions especially in the banking sector. This has also led to the move by the regulatory body for Insurance, National Insurance Commission (NAICOM) encouraging insurance companies to pay more attention to operational risks in order align the industry with international best practices and move towards risk-based regulation. A distinct gap in the research on operational risk management has been identified especially in the insurance industry.

Though of importance, operational risk in general was rarely taken into account by the insurance industry until guidelines in Solvency II required for its management (Guillen, Nielsen, and Perez-Marin, 2008).

Empirical literature on operational risk in Nigeria because it is an emerging area of research. The bulk of research in this area majorly focuses on documenting the size and significance of operational losses (Chernobai, Jorion, and Yu, 2011). The bulk of literature in operational risk management focuses mainly on the banking industry, with emphasis on the measurement and calculations of operational risk. Its definition is also adapted by other areas of financial institutions (Acharyya, 2012). Wei (2003) also observed that regulatory bodies also increasingly recognize the benefits of operational risk management and propose that it should become an important feature of a sound risk management practice in financial institutions (Martin and Hayes, 2013). The insurance industry in Nigeria is an interesting setting within which to examine the above issue for a couple of reasons.

Firstly, according to the World Bank Report (2013), Nigeria is one of the fastest growing economies of the world with an average annual growth of 7% in the past decade. Secondly, the insurance industry is a major component of any economy and has been associated with economic growth all around the world and is the major commercial risk management tool (Outreville, 1996). It also has a significant impact on both the productivity of the economy and the volume of savings in terms of financial intermediation, risk aversion and employment generation (Ujunwa, 2011). Thirdly, Nigeria, an underdeveloped economy is characterized by changes in regulations by adapting and adopting regulations from developed economies due to its nascent democracy. Formation, implementation and enforcement of policies are on different scales

depending on transparency, ethics and accountability (Adelopo, Obalola, and Omoteso, 2015). Fourthly, according to (Mitra, Karathanasopoulos, Sermpinis, Dunis, and Hood, 2015), Sharifi, Haldar, and Rao (2016) and Packchanyan (2016), generally there is limited research on operational risk in emerging and developing countries' financial institutions. Finally, given the potential of the insurance industry being the largest in Africa (Mojekwu and Yusuf, 2009), Nigeria is an attractive place for foreign direct and indirect investment (Oke, 2012).

This motivation for this study stems from the gaps revealed in the literature and industry information on the operational risk management in Nigeria. As a result, by focusing on the interplay between operational risk management and the insurance decisions in Nigeria, our study is likely to be of interest to insurance companies, insurance regulators, and financial analysts, among others.

In attempting to investigate the practice of operational risk management in Nigerian insurance companies, the following research questions were posted;

i. What is the current practice of operational risk management in the Nigerian Insurance Industry?
ii. What are the challenges of operational risk management in the Nigerian Insurance industry?

This paper is aimed at examining operational elements of business and assessing the practice of operational risk management in a developing economy; identifying operational risk events; and the challenges encountered in the implementation of operational risk management.

This paper would bridge the knowledge gap in the insurance industry, which is yet to be fully explored, and also hopes to contribute to the existing literature of risk management in developing economies particularly in Nigeria where risk management is still at its rudimentary stage.

2. LITERATURE REVIEW

REVIEWS OF EMPIRICAL WORK ON OPERATIONAL RISK MANAGEMENT

According to Jorion (2010), ignoring the proactive management of operational risk using an adequately defined framework, leads financial institutions to expose themselves to huge losses and loss of reputation. Martin (2009), in stressing the importance of operational risk management opines that operational risk management is the very essence of a company without which there can be no confidence that a company is being managed on a safe and ethical basis. It is also argued by Hsu, Backhouse and Silva (2014), that the accumulated failures of financial institutions in managing operational risk resulted in a worldwide disaster for the industry. In order to efficiently

manage operational risk, more has to be done apart from simply taking adequate steps to protect against fraud, business contingencies or having a risk management framework in place. This argument is further strengthened by the arguments of Wang and Hsu (2013) and Martin (2009) where they opine that operational risk management needs to be seen as the cornerstone of good corporate governance in firms because the board is responsible for monitoring and offering support to management in the development and implementation of appropriate operational risk policies and standards. Previous studies such as Wei (2006); Cummins et al., (2006); Tandon and Mehra (2017) insist that management of operational risk encourages better behavior among firms.

Organizations now, in seeking to maximize profit and remain competitive have come to the realization that risk and its management is an essential element for the estimation of managerial performance and economic performance (Arab, 2012). Studies such as Chen et al, 2009; Dietrich and Wanzeneid, 2011 observed a positive relationship between quality of risk management and profitability. In managing operational risk management, Hsu et al., (2014, p.68) suggest that managers should "create a mechanism to support the process of establishing, creating and communicating definitions, rules and policies, and by doing this, a significant structure is produced and reproduced through users reviewing and resetting many of their previous assumptions and beliefs".

The empirical literature on operational risk and operational risk management, in developing economies, particularly in the insurance industry is rather thin. Operational risk management is usually ignored by the developing countries and not considered an essential part of risk management (Khan, 2015). This may be due to the less developed and uncontrollable infrastructure such as lack of credit rating agencies; non-authentic and bias data collection and weakness of internal controls (Khan, 2015). According to a 2008 Towers Perrin study, operational risk management is still a weak point for many insurance companies (Ferris, 2012).

2.2 OVERVIEW OF THE NIGERIAN INSURANCE INDUSTRY AND THE REGULATORY ENVIRONMENT

The insurance industry in Nigeria has been characterized as constantly being in a permanent updating process in relation to global and country economic trends for example, The National Insurance Commission (NAICOM) has issued out guidelines in 2012, 2017 and 2019 directed towards developing a risk management framework for insurers. The insurance industry is vastly untapped in a growing economy with a percentage of GDP at 0.4% and thus provides a great potential for growth based on the industry's size and strategic importance (All Africa, 2019). According to BMI, 2016's report, the insurance industry in Nigeria has growth prospects and is increasingly an

attraction for foreign investors. Life insurance business highlights a growth rate of 12.5% annually while non-life insurance will grow by 8.8% annually (BMI, 2016).

Supervision of the insurance industry is basically aimed at ensuring that insurance companies are being compliant of rules and regulations (Doff, 2007). Insurance companies, in order to have a long-term ability to fulfill their liabilities, need to use precisely their own resources to keep their solvency. Insurer's insolvency threatens primarily the insured persons and then the entire financial sector, which is the reason why the insurance industry is regulated by relevant legal rules (Kozarevic, Sain, & Hodzic, 2014).
National Insurance Commission (NAICOM) was established in 1997. NAICOM is charged with regulation and supervision of insurance industry in Nigeria. NAICOM objectives include: establish standards for conduct of insurance business; ensure that insurance companies maintain adequate capitalization and reserves; ensure good management of insurance companies; and protect insurance policy holders. NAICOM is headed by Commissioner of insurance, who reports to the Minister of Finance.

In the Nigerian context, NAICOM as a regulatory body ensures financial stability by reviewing investment guidelines, monitoring investment portfolio and assessing prescribed solvency compliance of insurance companies. Every Insurance company in Nigeria is required to maintain solvency margins based on the type of business conducted. In 2012, risk management guidelines for insurance companies was issued. These guidelines have since been updated but yet to come in force. The focus of the risk management 2019 guideline are capital requirement for insurance practice; establishment and implementation of effective risk management; full implementation of risk based capital for the three main risks – credit, market and operational risks (Thomas, 2019). The road map effecting these guidelines have been released and should commence in 2020.

3. MATERIALS AND METHOD

The study adopted a quantitative approach using survey by collecting data through a questionnaire. The study uses primary data in the form of a survey using questionnaire as an instrument for data collection (Ekinci, 2015). Primary data was collected with the aid of a structured questionnaire.
The population investigated in this research are the employees of the Insurance industry in Nigeria. The Insurance industry consists of Insurance companies, Re-Insurance companies, Insurance Brokers, Takaful Insurance and Loss Adjusters duly registered with the National Insurance Commission (NAICOM). There are currently sixty-four (64) companies in this fold – twenty five (25) composite; ten (10) general; twenty-five (25) life; two (2) re-insurance; and two (2) Takaful insurance companies (NAICOM, 2019).

Stratified sampling was utilized in separating and dividing the insurance companies based on by their characteristics such as the type of insurance business conducted and the type of ownership. Random sampling was further used to select the sample size. The target population comprises of employees within the sampling frame of 60 duly registered insurance companies operating in Nigeria. Utilizing disproportionate random sampling, a sampling unit of 20 insurance companies with 20 questionnaires per company surveyed. A total of 350 respondents – a response rate of 87% were used for the analysis of this research.
Consequently, the findings of this study can be used as means of generalization for the Nigerian Insurance Industry.
The research employed the use of descriptive research design, for instance means and standard deviations.

4. RESULTS AND DISCUSSION

4.1 OPERATIONAL RISK MANAGEMENT STRATEGY

Table 1: Operational Risk Management Strategy

Variables	Response Label	N	%
Regulatory capital set aside for operational risk			
	< 10m	58	16.6
	N11m – N25m	91	26.0
	N26m – N50m	106	30.3
	N51m – N75m	62	17.7
	> N76m	33	9.4
Operational risk evaluation methods			
	Scenario analysis/Stress testing	283	80.9
	Factor based on volume measures	261	74.6
	Stochastic modelling	229	65.4
	Firm-developed model	234	66.9
	Others	130	37.1
Operational risk quantification			
	Single loss estimate	63	18.0
	Model based on scenarios	85	24.3
	Loss data analysis	65	18.6
	Hybrid model	119	34.0
	Others	18	5.1
Operational risk aggregation with total capital requirements?			
	VaR/CoVar	57	16.3
	Gaussian copula	66	18.9
	Sum	86	24.6
	T-copula	118	33.7
	Others	23	6.6

Means of regulatory capital calculation for operational risk management			
	Basic indicator approach	60	17.1
	Standardized approach	105	30.0
	Advanced measurement approach	58	16.6
	No structured method of measurement	127	36.3
Responsibility for operational risk management implementation			
	CEO	26	7.4
	CFO	60	17.1
	Other Member of Board	58	16.6
	Head of Risk Management	110	31.4
	Business Unit Head	30	8.6
	Head of Audit	66	18.9

Source: Field Survey, 2018.

Above is the descriptive analysis of the data with reference to operational risk management strategy as illustrated in Table 1. As concerns the amount of regulatory capital set aside for operational risk, 30.3% have between ₦26m – N50m set aside to manage operational risk. In terms of what organizations use in evaluating operational risk, majority chose scenario analysis/Stress testing at 24.9%. Most respondents (34.0%), indicate a hybrid model used in quantifying operational risk in their organizations and 33.7% aggregate operational risk with total capital requirements using the T-copula method. Also 36.3% indicated no particular method of calculating regulatory capital closely followed by the standardized approach (30.0%). Finally, the responsibility of ORM still rests with the Head of Risk Management at 31.4%. The study concludes that the most suitable qualitative measure of operational risk among Insurance companies is the Risk Self-Assessment (RSA) and no structured method of measurement. All the information obtained and analyzed confirmed and supported this conclusion. The relevance of this method lies mostly on its efficiency and ease of application. Again it was favored as a consequence of the unavailability of historical data for any complex calculations (Martin and Hayes 2013). Jobst (2007) reveals that effective operational risk measurement lies on how operational risk losses are reported and the sensitivity of quantitative methods used in generating risk estimates for models.

The findings of the research showed that operational risk management responsibility in insurance companies has been the responsibility of the head of audit and head of departments, rather than chief risk officers, risk committee or CEOs. This finding was consistent in 50% of the insurance companies studied. This information on the responsibility for operational risk

management is vital for the adequate management of operational risk. Despite the fact that everyone within the insurance company should be involved in the risk management process as stated earlier, there is need for the insurance companies to identify one or more persons who will be directly in charge of setting standards, monitoring compliance, organizing review meetings and committees.

The findings confirmed that an effective management of risk should entail the institutionalization of a detailed and separate structure for operational risk management. Within such a coordinated structural approach, it is also imperative to create and define an explicit reporting line between risk officers, risk managers, and the Chief Executive Officer (CEO).
However, where these programs exist they have been in place for such a short period of time to actually make any noticeable impact either on the company's profits or performance.

REASONS FOR ORM IMPLEMENTATION

Table 2: ORM Implementation

Variable	Response Label	Frequency	Percentage	Rank
Main reasons for implementing Operational Risk Management				
	Regulatory Requirements	339	94.9	1st
	Good Business Practice	324	92.6	2nd
	Corporate Governance	243	69.4	4th
	Competitive Advantage	281	80.3	3rd

Source: Field Survey, 2018

We provided the respondents with four main reasons for implementing operational risk management and asked them to indicate all the main reasons. From the above table 2, the reasons are rated in order of frequency. 94.9% were for regulatory requirements, this is consistent with the findings of Kilavuka (2008) and Deloitte Report (2014). 92.6% of the respondents rated good business practice as the main reason, 80.3% indicated competitive advantage as being the major reason and 69.4% indicated corporate governance. This indicates that the insurance industry is willing to manage operational risk as an internal reality as well as a matter of regulatory compliance.

OPERATIONAL RISK ASSESSMENT

Table 3: Risk Matrix

	Not at all Significant	Less Significant	Fairly Significant	Significant	Very Significant
Very Frequent					
Frequent					
Fairly Frequent			BDSF;BPR;CPBP; EPWS; DPA		
Less Frequent		EF	IM/IF		
Not Frequent at all					

Key	Meaning
EF	External Fraud
BDSF	Business Disruption and System Failure
BPR	Business Process Risks
CPBP	Clients, Products and Business Practices
IM/IF	Intentional Misconduct/Internal Fraud
EPWS	Employment Practices and Workplace Safety

Source: Field Survey, 2018.

The above table reflects the responses obtained with reference to operational risks in the Insurance companies. It transfers these operational risks on to a risk matrix. The Turnbull (2001) report recommends the classification of risk impact is shown below:

High impact, high likelihood; High impact, low likelihood; Low impact, high likelihood; and Low impact, low likelihood Insurance companies will not have a successful risk mitigation strategy if these factors of operational risk are not adequately identified and defined. Therefore, the findings of this study have an implication for capital allocation and setting of internal control measures for operational risk management in insurance companies in Nigeria.

OPERATIONAL RISK MITIGATION

Table 4: Risk mitigation methods adopted

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
Adequate insurance	6.0	9.1	31.1	28.6	25.1	3.5771	1.13730
Adequate control measures	8.6	12.6	28.0	29.1	21.7	3.4286	1.20376
Outsourcing	7.4	24.0	29.4	26.0	13.1	3.1343	1.14392
Risk-based audit	5.1	7.4	28.0	37.4	22.0	3.6371	1.06375
Alternative risk transfer e.g hedging, swaps	9.1	17.7	30.3	25.1	17.7	3.2457	1.20275

Source: Field Survey, 2018.

In Table 4, risk-based audits (M = 3.64, SD = 1.06) and adequate insurance (M = 3.56, SD = 1.14) are the most popular operational risk mitigation

methods adopted by insurance companies in Nigeria. Alternative risk transfer (M = 3.24, SD = 1.20) is the least favored method. This implies that most insurance companies would either treat (risk-based audit), transfer (insurance) or tolerate (control measures).

4.3 OPERATIONAL RISK MANAGEMENT CHALLENGES

Table 5: Future concerns for operational risk

Variables	Scale Level					Mean	Std Dev.
	1	2	3	4	5		
Increases in regulation	.6	.3	12.3	38.0	48.9	4.3429	.74721
Increase in reputational risk		7.1	31.4	21.1	40.3	3.9457	1.00139
Inability to retain key staff	13.4	15.7	24.3	24.6	22.0	3.2600	1.32568
Increases in errors from people/failure of systems	6.0	8.0	18.9	29.4	37.7	3.8486	1.18609
Increase in fraud activities	11.7	14.9	16.3	24.3	32.9	3.5171	1.38286
Inability to retain clients	.3	4.9	24.9	31.1	38.9	4.0343	.92651
Increase of legal risk	9.7	12.3	18.9	31.7	27.4	3.5486	1.27649
Increase in public scrutiny	9.7	12.3	20.6	25.1	32.3	3.5800	1.31256
Inability to manage going business concerns	8.6	12.6	28.9	24.9	25.1	3.4543	1.23322

Source: Field Survey, 2018.

Table 5 presents the results for the challenges of operational risk management in the insurance industry. The inability to attract and retain key staff (M = 3.26; SD = 1.32) is the least challenge encountered in operational risk management in the insurance industry in Nigeria. This provides a contrary result to the report of Deloitte in 2014. The main challenges are increases in regulation (M = 4.34; SD = 0.75) is consistent with the study of Martin and Hayes (2013); inability to retain clients (M = 4.03; SD = 0.93); increase in reputational risk (M = 3.95; SD = 1.00) and increases in errors from people/ failure of systems (3.85; SD = 1.19).

5. CONCLUSION AND RECOMMENDATIONS

The push towards risk-based supervision for insurance companies and the need to ensure compliance with international best practices motivated this study. This paper explores the range of operational risk management practices of insurance companies in Nigeria. By drawing on a wide variety of documented resources and literature from both academia and the industry, as well as on existing and proposed regulation, this paper has provided a foundation by which operational risk can be identified and assessed in the Nigerian insurance industry.

The study set out to explore the current practice of operational risk management in the Nigerian Insurance Industry. Whilst doing that the study assesses the practice of operational risk management; identify and categorize operational risks; as well as identify challenges of operational risk management in the Nigerian Insurance industry.

The result gives conclusive evidence of heightened awareness and due importance being given to operational risk and operational risk management. It establishes the awareness on the importance of operational risk management in the Nigerian insurance industry.

Implications of Findings for Management Practice

The findings have major implications to the financial sectors and regulatory agencies in Nigeria. Operational risk management practices have to be fully implemented and reflective in the overall performance of insurance companies in order to achieve international best practices. Results show that operational management concept is still evolving and not fully embedded across the industry. A solid operational risk management framework will ensure that insurance companies are able to keep abreast with regulators and stakeholders. By identifying and assessing operational risk across the industry, insurance companies are able to reflect on their risk profile and link mitigating costs with benefits achieved and thus assess the effectiveness of operational risk management.

In terms of challenges, insurance companies are wary of increased regulation. Though the landscape is evolving, regulatory authorities should provide a robust guideline for reviews so that insurance companies are aware of what is expected of them at all times.

This paper would be of importance to both academics and practitioners in the financial services sector. First it highlighted the operational risk management strategy adopted by insurance companies in Nigeria, and was able to design a risk matrix for operational risks. Secondly it identified the challenges, insurance companies face in their implementation of operational risk management. In the field of academia it would contribute to empirical studies conducted in the area of operational risk and operational risk management. It will also assist regulatory bodies to regulate the sector better with reference to operational risk management. Overall the study can assist insurance companies contribute to effective business management and gain a competitive edge as the study proposes that the success of an organization relies on managing its operational risks effectively.

Further studies geared towards linking the effectiveness of operational risk management to the type of insurance company and profitability of insurance companies. In addition, research can be directed towards the role of culture in establishing and embedding an operational risk management framework in insurance companies in Nigeria.

REFERENCES

Acharyya, M. (2012). Why the Current Practice of Operational Risk Management in Insurance is Fundamentally Flawed - Evidence from the Field. *Enterprise Risk Management Symposium*, (pp. 1 - 21).

Adelopo, I. A., Obalola, M. A., & Omoteso, K. (2015). Corporate Governance in Developing Economies: A Review of Audit Committee Provisions in Nigeria. *Nigerian Journal of Management Studies, 13*(1), 45-59.

All Africa Report. (2019). *Agusto & Co Assigns 'BB' Rating to Nigerian Insurance Industry.* Washington: SyndiGate Media Inc.

Arab, W. H. (2012). The determinants of frequency and severity of operational losses in Tunisian insurance industry. *The Journal of Risk Finance, 13*(5), 438 - 475.

Business Monitor International. (2012). *Nigeria Insurance Report.* Bharat Book Bureau.

Chen, J.-S., Chen, M.-C., Liao, W.-J., & Chen, T.-H. (2009). Influence of Capital Structure and Operational Risk on Profitability of Life Insurance Industry in Taiwan. *Journal of Modelling in Management, 4*(1), 7 - 18.

Chernobai, A., Jorion, P., & Yu, F. (2011). The Determinants of Operational Risk in US Financial Institutions. *The Journal of Financial and Quantitative Analysis, 46*(6), 1683 - 1725.

Cormac, B., Webb, R., Cheevers, C., Ring, D., & Clark, G. (2016). Should the Insurance Industry be banking on risk escalation for Solvency II? *International Review of Financial Analysis, 46*(2), 131 - 139.

Cummins, D. J., Lewis, C. M., & Wei, R. (2004). The Market Value Impact of Operational Risk Events for U.S Banks and Insurers. *Unpublished*.

Deloitte. (2014). *Deloitte Insurance Risk Management Survey: State of the Industry.* Lagos.

Dietrich, A., & Wanzenreid, G. (2011). Determinants of bank profitability before and during the crisis :Evidence from Switzerland. *Journal of International Markets, 21*(3), 307 - 327.

Doff, R. (2007). *Risk Management for Insurers: Risk Control, Economic Capital and Solvency II.* London: Incisive Financial Publishing Ltd.

Ekinci, Y. (2015). *Designing Research Questionnaires for Business and Management Students.* London: Sage.

Ferris, S. (2012). Expensive Mistakes: Operational Risk in Life Insurance. *Risk Management and Insurance Review, 15*(2), 263 - 288.

Ferris, S. (2012). Expensive Mistakes: Operational Risk in Life Insurance. *Risk Management and Insurance Review, 15*(2), 263 - 288.

Gatzert, N., & Kolb, A. (2013). Risk Measurement and Management of Operational Risk in Insurance Companies from an Enterprise Perspective. *The Journal of Risk and Insurance, 81*(3), 683 - 708.

Guillen, M., Nielsen , P. J., & Perez-Marin, A. M. (2008). The Need to Monitor Customer Loyalty and Business Risk in the European Insurance Industry. *The Geneva Papers on Risk and Insurance: Issues and Practice, 33*(2), 207 - 218.

Hemrit, W., & Arab, M. B. (2012). The Determinants of frequency and severity of operational losses in Tunisian Insurance Industry. *Journal of Risk Finance, 13*(5), 438 - 475.

Hemrit, W., & Ben Arab, M. (2012). The Major Sources of Operational Risk and the Potential Benefits of its Management. *Journal of Operational Risk, 7*(4), 71 - 92.

Hsu, C. (2014). Institutionalizing Operational Risk Management: An Empirical Study. *Journal of Information Technology, 1*(29), 39 - 72.

Jorion, P. (2010). Risk Management. *Annual Review of Financial Economics, 2*, 347 - 365.

Khan, M. I. (2015). Effects of Operational Risk Management on Financial Institutions. *Journal of Business Strategies, 9*(1), 83 - 105.

Kilavuka, M. (2008). Managing Operational Risk Cpital in Financial Institutions. *Journal of Operational Risk, 3*(1), 67 - 83.

Kozarevic, S., Sain, Z., & Hodzic, A. (2014). Obstacles to Implementation of Solvency Regime in Non-Life Insurance Companies in Bosnia & Herzegonia. *UTMS Journal of Economics, 5*(2), 99-211.

Martin, M., & Hayes, M. (2013). Operational Risk Management: Practical Implications for the South African Insurance Industry. *South African Actuarial Journal, 13*(3), 39 - 95.

Martin, P. (2009). As risk mamangement evolves, is operational risk management important? *The Journal of Operational Risk, 4*(4), 75 - 84.

Mitra, S., Karathanasopoulos, A., Sermpinis, G., Dunis, C., & Hood, J. (2015). Operational Risk: Emerging Markets, Sectors and Measurement. *European Journal of Operational Research, 241*, 122 - 132.

Mojekwu, J. N., & Yusuf, T. O. (2009). The Attitude and Perception of Life Insurance Policyholders in Nigeria: The Effects on African Economies. 67 - 77.

Oke, M. O. (2012). Insurance sector development and economic growth in Nigeria. *African Journal of Business Management, 6*(23), 7016 - 7023.

Outreville, F. J. (1996). Life Insurance Markets in Developing Countries. *The Journal of Risk and Insurance, 63*(2), 263 - 278.

Packchanyan, S. (2016). Operational Risk Management in Financial Institutions: A Literature Review. *Imternational Journal of Financial Studies, 20*(4), 1 - 21.

Sharifi, S., Haldar, A., & Rao, N. S. (2016). Relationship between Operational Risk Management, Size and Ownership of Indian Banks. *Managerial Finance, 42*(10), 930 - 942.

Tandon, D., & Mehra, Y. S. (2017). Impact of Ownership and Size in Operational Risk Management Practices: A Study of Banks in India. *Global Business Review, 18*(3), 795 - 810.

The Turbull Report. (2001). *Internal Control and Risk Management: The developing role of internal audit.*

Ujunwa, A., & Modebe, N. J. (2011). Repositioning Insurance Industry for Operational Efficiency: The Nigerian Case. *Journal of Applied Finance and Banking, 1*(3), 15 - 32.

Wang, T., & Hsu, C. (2013). Board Composition and Operational Risk Events of Financial Institutions. *Journal of Banking and Finance, 37*(1), 2042 - 2051.

Wei, R. (2003).

World Bank Report. (2003). *The Nigerian Insurance Industry.*