Enterprise Risk Management Practice in Insurance Companies: An Empirical Study of Nigerian Insurance Industry

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Abstract
The paper examines enterprise risk management (ERM) practice in insurance companies in Nigeria. Specifically, the study explores the understanding, motivation and performance of ERM in the Nigeria's insurance industry, and the challenges which insurance companies faced in implementing ERM. The study concludes that the level of understanding of the nature of ERM varies significantly between companies and between different parts of the same organisation. The implication for practice is that effective ERM requires an interdisciplinary approach; but, the ERM which is practiced by insurers in Nigeria is dominated by a single discipline. The design of ERM is highly company specific and depends on several factors, e.g., the business model in terms of type of business, geographical presence, etc. ERM design also depends on the risk appetite of an organisation, which includes both qualitative and quantitative elements.

Keywords: *Enterprise risk management, Risk communication, Risk measurement, shareholders, stakeholders, Insurance industry, Nigeria*

1. INTRODUCTION

In view of global dynamic economy, enterprise risk management (ERM) is imperative for the survival of every organisation. ERM involves identifying, assessing, managing and monitoring an organisation's opportunities and threats. ERM is more important for an insurance company because managing risk is the primary function of an insurance company. Consequently, insurers are increasingly becoming more interested in ERM. Insurance companies are exposed to both financial and non-financial risks. Several professionals need to work together in a typical insurance company in order to attain the corporate objectives. Risk should, therefore, be managed holistically beyond disciplinary frontiers so as to provide a common understanding across multidisciplinary personnel. However, most insurance companies often manage risks in a traditional manner, silo-based; but not holistically. Insurers need to embrace ERM in order to remain competitive in their business. To entrenched ERM in insurance industry in Nigeria, the National Insurance Commission (NAICOM) issued and released 'Guidelines for developing risk management framework for insurers and reinsurers in Nigeria' in 2012 (Ayeleso, 2012; Naeche, 2012; Onyeka, 2012). The guideline, which is operative from July 2012, requires all insurers and reinsurers to establish a process for identifying, assessing, controlling, mitigating and monitoring all material risks which must be developed in the light of the company's risk management philosophy, set of shared beliefs, attitudes, values, culture and operating style. The guideline will be used for conducting on-going assessment of the risk management systems of all insurers and reinsurers in Nigeria. The enormous task faced by most insurers is how to ensure effective compliance with the guideline. The study addresses the following questions:

1. What is the understanding of the nature of ERM within the insurance industry?
2. What motivates insurance companies to develop ERM?
3. What challenges do they face in implementing ERM?
4. How do they measure the performance of ERM?

The paper is divided into seven sections. Section 1 introduces the study, section 2 outlines scope and objective of study, section three describes the research methodology and data, section four explores theoretical framework and review of literature, section five highlights ERM as practiced by insurers in Nigeria, section six discusses emerging themes from ERM practice, and section seven summarises the study findings.

2. SCOPE AND OBJECTIVES OF STUDY

The paper investigates the extent to which insurers manage risks in a true holistic manner in the Nigeria's insurance industry. Specifically, objectives of the study include:

a) To develop a theoretical conception of ERM based on the existing literature;
b) To identify various disciplinary perspectives of risk;
c) To explore the understanding of ERM in insurance companies in the Nigeria's insurance industry;
d) To highlight the driving forces of ERM;
e) To appraise challenges faced by insurers in implementing ERM in the Nigeria's insurance industry; and
f) To assess the performance of ERM in the Nigeria's insurance industry.

3. RESEARCH METHODOLOGY AND DATA

Risk management initiatives of insurers in the Nigeria's insurance industry were explored. Both primary and secondary data were utilised for the study. These data are relevant and well suited for the study, as insurance can be examined from both quantitative and qualitative perspectives. The literature is the source of the secondary data. Prior to the collection of primary data, the literature was reviewed to develop the theoretical framework of ERM. Primary data were collected through survey and interview. The survey entailed administration of highly structured questionnaires to respondents in order to develop a comprehensive and consistent database for the study. Subsequently, semi-structured interviews of senior and middle level managers were undertaken. The population of the study consists of insurance companies in Nigeria. The sample is made up of 12 insurance companies selected through random sampling method. The identities of the companies are not revealed here due to commercial sensitivity. 120 participants, 10 each from the selected companies, were enlisted for the survey. Out of the 120 questionnaires distributed; only 86, representing about 72% response rate, participated in the survey. The questionnaire involved a series of Yes or No answers. The background of the respondents in the selected companies are: 27 Underwriting (31%), 14 Reinsurance (16%), 17 Claims (20%), 12 Finance & investment (14%), 10 Human resources (12%), and 6 Actuary (7%). Similarly, 24 face-to-face interviews, 2 each from the selected companies, were conducted within Lagos metropolis. The views of a range of industry observers (i.e., leading academics, risk management consultants and rating agency executives) were also sought. Additionally, the notes taken by the researcher at various risk management and insurance conferences/seminars both in Europe and locally in recent years provided valuable ideas in the analysis of data and in developing conclusions. The resultant data were coded, processed and analysed with IBM SPSS V19 Software. The questionnaire results and respondents' interview were combined to develop data for the study. The results

were then compared to address the research questions relating to the: understanding, motivation, challenges in implementation, and performance of ERM. The analysis reveals ERM framework as practiced by insurers in the Nigeria's insurance industry. This is also compared with the "theoretical framework of ERM" developed from the literature.

4. THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

Insurance is a mechanism for treating risk; and it can be examined from both quantitative and qualitative perspectives. Insurance add value to both economy and society (Skipper, 2005). Insurance facilitates transfer of economic risk to the insurer, while the actual risk remains with the insured (Gordon, 2003; Fadun, 2013a). This is possible because insurers have a more diversified portfolio of exposures which help to reduce the effect of unexpected losses. This suggests that insurers have some established and tested mechanisms to manage those risks in order to produce profit and meet the expectations of their stakeholders. Premium is one of the primary sources of insurance companies' income. There are three major risks associated with the collection of insurance premium: (1) pricing or underwriting risk, (2) solvency risk, and (3) customer relationship risk. Pricing or underwriting risk is the risk that the price charged for insurance is not adequate to cover the losses generated by that insurance. Insurance companies essentially price risk based upon statistical analyses of loss distributions *per* homogenous risk class. Such analyses frequently produce a pure premium loss cost, which is loaded for expenses and profit to derive the rate ultimately used to calculate insurance premium. Collecting premium for underwriting risk can also generate solvency risk, or the risk that insurance companies will be unable to satisfy the obligations they have assumed. This risk is generally monitored very carefully by insurance regulatory authorities through measures such as Risk Based Capital formulas. Another risk associated with collection of insurance premium is customer relationship risk. For example, commercial insurance is procured predominantly through the use of insurance agents or brokers. Moreover, other important changes in the insurance environment include: law of large numbers, legal framework, accounting, regulations (solvency II), rating agencies, investors community, internationalisation/globalisation and capital markets (Porro, 2007). ERM has emerged as a framework or structured approach combining strategies, resources, technology, and knowledge to assess and manage uncertainties enterprises faced (Hoffman, 2009).

Why ERM in the insurance industry

1. Risk management is useful for managing both downside and upside risks. More importantly, it can help a firm gain the greatest benefits from the upside.
2. The insurance business is becoming more complex; hence effective and holistic risk management framework across the entire business is more important than ever. Moreover, ERM is highly relevant in the Nigeria insurance industry partly due to product innovation.
3. More importantly, ERM is imperative as insurance companies are acquiring, investing or starting up businesses in other areas of financial services such as banking, trust and asset management.
4. Globally, regulators (including NAICOM) are increasingly focusing on ERM. This has been the case with the banking sector for several years since the introduction of Basel II in the banking system. See Fadun (2013b) for detailed discussion on: implications and challenges of Basel II implementation in the Nigerian banking system.
5. Investors and rating agencies are increasingly requesting for ERM within the companies they cover. Basel II (Solvency II) standardised approach relies on ratings from external rating agencies. In Nigeria, presently there are only 5 credit rating agencies approved by the

Securities and Exchange Commission (SEC)[1]. They are: Agusto and Co. Ltd., Brickfield Road Associates Limited, Datapro Limited, Global Credit Rating and Pharez Limited. Moreover, out of these five, only the first three are readily accessible and produce solicited and unsolicited credit assessment of businesses (Fadun, 2013b). This necessitates the need for establishment and licensing of more rating agencies which specialise in assessing insurance companies in Nigeria.

6. Due to the global financial crisis, non-executive directors are increasingly interested in their companies business; especially how the companies manage their risks and how risks are inter-related. Moreover, an integrated view on risk is not only requested internally by management, but external stakeholders also focus more on these capabilities.

In the past, risk management was rarely undertaken in a systematic and integrated manner across the firm. Before NAICOM released 'Guidelines for developing risk management framework for insurers and reinsurers in Nigeria' in 2012 (Ayeleso, 2012; Naeche, 2012; Onyeka, 2012); insurers have always practice some forms of risk management, implicitly or explicitly (Meulbroek, 2002a). Traditional risk management views risk as a series of single elements, not related to others, where individual risk are categorised and managed separately (Wolf, 2008; Hoyt and Liebenberg, 2011). The holistic approach to managing organisation's risks differs substantially from historical practice, as typical firm's tends to aggregate risk (holistic risk management), rather than isolating them (traditional risk management) (Wolf, 2008; Hoyt and Liebenberg, 2011). The holistic approach, often referred to as enterprise risk management (ERM), engages risks across a variety of levels in the organisation; thus focusing on both opportunity and threat. Meanwhile, the term ERM has similar meaning with Corporate Risk Management (CRM), Holistic Risk Management (HRM), Integrated Risk Management (IRM), Strategic Risk Management (SRM), Enterprise-Wide Risk Management (EWRM) and Business Risk Management (BRM) (D'Arcy, 2001; Kleffner et al., 2003; Liebenberg and Hoyt, 2003; Manab *et al*., 2007; Hoyt and Liebenberg, 2009; and Yazid *et al*., 2009; Fadun, 2013c).

Traditionally, risks in insurance companies are managed in departmental silos. While pure risk (downside risk) is the key concern of the underwriting, reinsurance and claims departments; speculative risks (associated with downside and upside risk) are of interest to the finance, treasury and investment departments. Objectivity is the main tool of technical managers (e.g., risk modelling, risk measurement, risk appetite, etc.), but subjectivity affects operational managers in the face of uncertainty. Theoretically, both the generalist and the specialist within the organisation are exposed to risk in their functions; thus, indicating the need for a common or mutually acceptable ERM framework. Consequently, the theoretical definition of ERM in the literature would be management of all risks in a holistic framework (Dickinson, 2001; Lam, 2003; Power, 2004; Dickinson, 2005; Nocco and Stulz, 2006; Alviunessen and Jankensgard, 2009; Fadun, 2013c). The key word in this definition is 'all risks', which stands for all insurance, financial, operational, strategic, hazard risk, etc. This embraces all risk from whatever source. Obviously, no individual discipline could develop such a holistic view of risk because each discipline perceives risk from a specific perspective. To ensure a holistic view is taken, all the actions from traditional risk management across the company should be consolidated in a central area, in order to obtain an overall view (ERM)

[1] The Securities and Exchange Commission (SEC) is the apex regulatory authority for the capital market in Nigeria. The SEC maintains proper standards of conduct and professionalism in the securities business and surveillance over the market to enhance efficiency.

of all risks in the company. ERM, therefore, represents a holistic approach to managing the risks that a company faces in a changing environment. Unlike traditional risk management approach where individual risk categories are separately managed in risk 'silos', ERM enables insurance companies to manage a wide array of risks in an integrated and enterprise-wide manner. Among others, firms benefit from ERM by increasing risk awareness thereby facilitating better operational and strategic decision-making, decreasing earnings and stock-price volatility, reducing external capital costs, increasing capital efficiency, and creating synergies between different risk management activities (Miccolis and Shah, 2000; Lam, 2001; Meulbroek, 2002b; Beasley *et al*., 2005).

5. ENTERPRISE RISK MANAGEMENT PRACTICED IN INSURANCE INDUSTRY

This section analyses the results of the empirical study in relation to each of the research questions identified above.

5.1 Understanding of ERM

Analysis of the interview transcripts revealed four key concepts associated with ERM in the minds of individual members of staff of insurance companies: harmonisation, standardisation, integration, and centralisation. Similarly, questionnaire responses also identified a close relationship, in the staff's minds, between standardisation and harmonisation. Although a striking feature of the interviews was that there is no common terminology in the understanding of ERM across disciplines. Table 1 indicates that 70 (81%) out of 86 respondents in the questionnaire survey believe that ERM is most closely associated with harmonisation, 68 respondents (79%) believe ERM is associated with standardisation, 60 respondents (70%) believe that it is associated with integration and 58 respondents (67%) believe it is associated with centralisation.

Table 1: Understanding of ERM (n = 86)

	Yes	%	No	%
Centralisation	58	67	28	33
Integration	60	70	26	30
Standardisation	68	79	18	21
Harmonisation	70	81	16	19

Source: Field survey, 2013

A narrow definition of harmonisation relates to increased coordination and streamlining of activities of different business groups. However, three underlying ideas help to conceptualise harmonisation. First, it may be view as a common approach to planning, managing and delivering risk; second, it can ensure a balance amongst the existing tools and policies; and lastly, it facilitates information sharing thereby promoting transparency and better coordination. Standardisation, which is close to the concept of harmonisation, is a technique for documenting, reviewing, and approving unique definitions, characteristics, and representations of data based on some established procedures and conventions. Integration consist aggregation of different parts to a holistic framework. The approach of integration involves both horizontal (across a layer of the organisation) and vertical (between layers of the organisation) aspects, whereas harmonisation and standardisation involve mostly a horizontal perspective. Finally, centralisation is conceived as an act of consolidating decision-making power under central control.

Furthermore, it is obvious that any structured scientific approach towards identifying, evaluating and managing risks requires standardisation. Only a common language can facilitate a comparison of scientific knowledge across the organisation; and a common language can only be secure through a meaningful dialogue (communication) among the stakeholders in identifying, analysing and quantifying risks in order to avoid surprises. In the aggregated approach, the focus is on 'macro' relationships rather than on individual risk elements or individual management decisions.

Basically, the theoretical framework for ERM suggested by the literature is most closely associated with the concept of integration. However, the questionnaire survey undertaken in revealed that insurance companies' staff perceived ERM differently. The result suggests that ERM does not emerge in organisations in a consistent pattern. While some respondents perceived ERM based on centralisation, others view ERM based on integration. The implication is that ERM is a multi-layered process, and the understanding of what it represents differs at different levels of management. To promote adequate understanding of what ERM represents, a vocabulary (a common language) should be developed to ensure that people across the organisation can understand risk in the same way across different disciplines (Verbrugge, 2003). In essence, this introduces the need for standardisation. Senior management, however, has a coordinating role to harmonise or align framework, offset duplication of risk management policies and arrangements through necessary modifications and alterations. Integration involves consolidating all three layers (centralisation, harmonisation and standardisation). While harmonisation and standardisation operate horizontally across a layer of the organisation, in terms of organisational policies and resources; centralisation operates vertically to control the entire ERM process. From this perspective, ERM can be defined as a four-layered process in terms of harmonisation, standardisation and integration and centralisation.

5.2 Motivations for ERM

Table 2 indicates the key driving forces for ERM as perceived by the respondents (ranked from lowest to highest) in the questionnaire survey. It shows that 81 (94%) of the respondents identified corporate governance as the main driving force followed by Solvency II (based on NAICOM guidelines for developing risk management framework for insurers and reinsurers in Nigeria) and leadership of the CEO: 80 respondents (93%). Other key driving forces for ERM identified by the respondents were: changing risk landscape, 65 respondents (76%); financial shock, 60 respondents (70%); initiative of Board of Directors, 59 respondents, (69%); innovation, 58 respondents (67%); globalisation, 56 respondents (65%); and mergers and acquisition, 56 respondents (65%). The respondents also identified the following factors as the least driving force of ERM: overcapitalisation, 9 respondents (10%); divestment, 30 respondents (35%); and market competition, 36 respondents (42%). The key driving forces identified, i.e. corporate governance, regulations and leadership of Chief Executive Officer (CEO), are now discussed in turn.

Table 2: Driving forces of ERM (n = 86)

Driving Force	**Yes**	**%**	**No**	**%**
Overcapitalisation	9	10	57	90
Divestment	30	35	56	65
Market Competition	36	42	50	58

Inadequate Reinsurance	37	43	49	57
Corporate Disasters	39	45	47	55
Reinsurers' Creditworthiness	40	47	46	53
September 11	41	48	45	52
Technology	46	53	40	47
Growth of ART	46	53	40	47
Undercapitalisation	49	57	37	43
Mergers & Acquisition	56	65	30	35
Globalisation	56	65	30	35
Innovation	58	67	28	33
Initiative of Board of Directors	59	69	27	31
Financial Shock	60	70	28	30
Volatile Economic Situation	61	71	25	29
Changing Risk Landscape	65	76	21	24
Leadership of CEO	80	93	6	7
Solvency II – Based on NAICOM Risk Management Guidelines	80	93	6	7
Corporate Governance	81	94	5	6

Source: Field survey, 2013

5.2.1 Corporate Governance

Corporate governance is relevant in insurance companies, as it promotes accountability, enhances transparency of operations, improves firm's profitability, protects stakeholders' interest by aligning their interest with that of the managers, and facilitates growth of the insurance industry. Corporate governance entails set of rules which governs relationship between a firm management, shareholders and stakeholders (Oyejide and Soyibo, 2001; Denis and McConnell, 2003; Ching *et al.*, 2006). Good corporate governance promotes economic growth and development. The benefits of good corporate governance practices to insurance companies, among others, include: facilitating greater access to finance, lower cost of capital, better performance and favourable treatment of stakeholders (Claessens *et al*., 2002); promoting better disclosure in business reporting, thereby facilitating greater market liquidity and capital formation (Frost *et al*., 2002); and increasing firm valuations and boast profitability (Gompers *et al*., 2003). Nigeria had its share of inelegant business practices that have resulted in failed corporate firms. Hence, several insurance companies in Nigeria have gone out of business; while some have been acquired or merged due to poor performance, following poor corporate governance practices. Consequently, pillars of corporate governance have been initiated by sponsoring a series of legislative, economic and financial reforms which seek to promote transparency, accountability and rule of law in the nation's economy. Specifically, NAICOM released 'Code of Good Corporate Governance for the Insurance Industry in Nigeria' in 2009 (NAICOM, 2009). For detailed examination of corporate governance in the Nigeria's insurance industry, see Fadun (2013d) - 'Corporate Governance and Insurance Firms Performance: An Empirical Study of Nigerian experience' - in the last edition [volume 3(1)] of the Journal.

5.2.2 Regulations

Essentially, regulations influence organisations behaviour through the exercise of governmental power, and stability of the insurance market is a primary concern of insurance

regulators (Mathur, 2001; Ross, 2001; Harrington, 2009). Traditionally, insurance legislation is focused on managing and reducing risks arising from insurance and investment operations. NAICOM seeks to entrenched ERM in the Nigeria's insurance industry; hence, 'Guidelines for developing risk management framework for insurers and reinsurers in Nigeria' was released in 2012 (Ayeleso, 2012; Naeche, 2012; Onyeka, 2012). The interview survey found that determining the amount of capital which is adequate to finance insurance company total acceptable risks from economic perspective is of central concern to stakeholders. The study, however, finds that management failure is the major reason for insolvency of insurers, suggesting that, to some extent, no amount of capital is adequate in the hands of inefficient management (Simon *et al*., 2003; Fadun, 2013e). Moreover, these indicates that internal control and management methods are important elements of ERM (Hutter and Power, 2001; Kleffner *et al.*, 2003; Power, 2005; Fadun, 2013d) despite the worry of internal auditors about maintaining independency from management functions. Consequently, regulations, in terms of ensuring solvency through risk and capital management, and appropriate corporate governance are seen as the key driver towards ERM in the insurance industry.

5.2.3 Leadership of the CEO

Although leadership of the CEO is identified by the questionnaire survey as one of the key driving forces of ERM, the analysis of interviews suggests that two key factors (i.e. regulations and the volatile economic situation) motivate CEOs to adopt ERM. Perhaps this is caused by the increasingly uncertainty in operating the businesses. The CEO is the ultimate Chief Risk Officer (CRO) of a firm. Hence, CEOs need to stimulate risk management in a holistic manner in order to encourage other employees to follow the initiative. This would promote effective implementation of ERM, and inculcate positive risk culture into business strategy at all level (Bowling and Rieger, 2005). Essentially, ERM must start in the boardroom so as to positively influence the way firms' thought about risk, and planned for eventualities (Guy, 2000). This is necessary because a definite risk strategy which provides specific guidelines on stages of the ERM journey should be clearly documented (Chapman, 2006). To appropriate the benefits of ERM, organisations must integrate risk management into the organisation's philosophy, practices, and business plans; rather than being viewed or practised as a separate programme (Carvalho, 2000).

In summary, corporate governance, regulations in terms of solvency and leadership of the CEO are found to be key driving forces for ERM in the Nigeria's insurance industry. Moreover, leadership of the CEO and also the CRO (to some extent) have added further momentum to introducing and shaping ERM according to the needs of their enterprises. It is difficult to manage companies in today fast changing, turbulent environment, especially when they become very large. Without a holistic view it is impossible to see either the big picture or the ideal shape of a balanced team; consequently, a balanced, interdisciplinary team and a balanced portfolio of risk are essential.

5.3 Challenges in Implementing ERM

Risk management is an integral part of the decision-making process; hence ERM can improve business performance, thereby minimising possibilities of business failures in Nigeria. Risk management failure can be caused either by operational failure (operational challenges) and operators' failure (technical challenges), or both (Fadun, 2013e). The first part of this subsection discusses the operational challenges and the second part the technical

challenges faced by Nigeria's insurance companies in implementing ERM (as perceived by the respondents).

5.3.1 Operational Challenges

The questionnaire survey results are summarised in Table 3 (ranked from lowest to highest) and these show that risk communication (the absence of a common risk language and a common risk culture) is identified as the key operational challenge by 72 (84%) out of the 86 respondents. This is followed by risk awareness amongst middle level staff and risk communication between different disciplines; both were supported by 69 respondents (80%). Accuracy, consistency, top level management risk awareness and inadequacy of data were also identified as key operational challenges.

Table 3: Operational challenges in implementing ERM (n = 86)

Operational Challenge	**Yes**	**%**	**No**	**%**
Data Storage	49	57	37	43
Determining Risk Ownership	57	66	29	34
Risk Classification	57	66	29	34
Risk Awareness at the Lower Level	59	69	27	31
Consistent Regulatory Framework	60	70	26	30
Appropriate Risk Analysis Technique	60	70	26	30
Linking Risks with Corporate Strategic	60	70	26	30
Data Adequacy	61	71	25	29
Data Consistency	62	72	24	28
Risk Controlling	63	73	23	27
Risk Accuracy	66	77	20	23
Lack of Transparency by Management	66	77	20	23
Risk Awareness at the Top Level (Strategic)	67	78	19	22
Risk Communication	69	80	17	20
Risk Awareness in the Middle Level	69	80	17	20
Common Risk Language	72	84	14	16
Common Risk Culture	72	84	14	16

Source: Field survey, 2013

Communication is often a challenge associated with an ERM (Nielson *et al*., 2005). The result suggests that lack of understanding is a major obstacle; hence risk communication must be improved and conflict overcome so that the goals of ERM can be achieved. Risk communication is, however, not an isolated issue. It is, therefore, necessary to link attitude of individuals towards risk and organisation's risk culture (Douglas and Wildavsky, 1982; Rippl, 2002; Skipper and Skipper, 2001; Tansey, 2004). Furthermore, all these issues are linked to the motivation of achieving risk management goals (Osterloh and Frey, 2000; Drew *et al*., 2006; O'Hara, 2006). Similarly, effective risk communication system can also introduce a culture of choosing good risks and rejecting bad risks at every level of the organisation (Masuda and Garvin, 2006).

Data was also found to be a key operational challenge. The main issue identified regarding data is not so much with the financial variables themselves, but in communicating the appropriate meaning of the variables to different staff involved in the ERM process. However, effective communication goes beyond the boundary of providing information and involves sustainable relationships among individuals, where mutual trust and respect are

essential. In investigating the barriers to effective communication, the study discovered two important factors (i.e., individual perception and preference for risk). Additionally, the study identifies risk culture as a broader issue, having a close relationship with perceiving and selecting risks, choosing objectives from various alternatives, and rational decision making. However, these aspects are very specific to each organisation. Nevertheless, understanding appears to be a key problem for implementing ERM. Although the literature suggests that ERM involves managing all risks, to finance staff 'all-risks' appears to mean all financial risks (e.g., fluctuation of asset values, foreign exchange, credit risk, etc.). For insurance staff 'all risks' means a combination of underwriting, pricing, reinsurance, reserving, and claims risks. The study discovered a serious misunderstanding of the meaning of 'all-risks' among staff from different disciplines. Therefore, risk communication, culture, and awareness need to be aligned through a common risk language to develop an efficient ERM system.

5.3.2 Technical Challenges

The questionnaire survey results (presented in Table 4) indicate that measurement of operational risks and modelling of risk are the key challenges perceived by 68 (representing 79%) of the 86 respondents. Measurement of strategic risk is identified as another key technical challenge by 66 (representing 77%) of the respondents. Furthermore, calculating correlations among business units (74%) and profiling risks and calculating correlations among risk classes (76%) are also identified as important technical challenges in implementing ERM.

Table 4: Technical challenges in implementing ERM (n = 86)

Technical challenges	**Yes**	**%**	**No**	**%**
Determining Risk Appetite	49	57	37	43
Determining Offsetting Benefit among Business Units	50	58	36	42
Risk Measurement Insurance (Financial)	55	64	31	36
Determining Offsetting Benefit among Business Classes	56	65	30	35
Risk Measurement – Noninsurance (Financial)	57	66	29	34
Calculating Risk Based Capital	58	67	28	33
Allocation of Capital across Business Units	59	69	27	31
Risk Identification	60	70	26	30
Risk Integration	60	70	26	30
Determining Correlations among Business Classes	65	76	21	24
Profiling Risk (Risk Database)	65	76	21	24
Risk Management Strategic	66	77	20	23
Risk Modelling	68	79	18	21
Risk Measurement Insurance (Operational)	68	79	18	21
Risk Measurement Noninsurance (Operational)	68	79	18	21

Source: Field survey, 2013

The challenge of measuring risks involves estimation of the probabilities of an outcome and this is complex because of ignorance associated with the subjectivity attached to the events. However, the main concern observed from the interview survey is the calculation of economic capital while absorbing diversification benefits. This is a particularly significant

issue for reinsurers as their businesses, by nature, are geographically diversified; whereas the retail insurers secure diversification through large volume.

5.4 Performance of ERM

Although the performance of the ERM system is paramount in order to avoid risk management failure (Fadun, 2013e). ERM has been given relatively little attention by insurance companies in Nigeria. Obviously, some key risk indicators, both in accounting and economic terms [Key Performance Indicators (KPI)], are ultimately linked to value creation and these are used by the insurance companies to illustrate the performance of ERM. Similarly, there are three major value drivers of the insurance business: production, investment and reinsurance (Calandro and Lane, 2002). Ordinarily, value is primarily determined by economic factors and not by accounting cash flows (Rogers, 2002); however, such a deterministic approach to measuring the performance of ERM is risky for two primary reasons. Firstly, it ignores all form of initiatives and efforts of team members simply because they are not measurable in terms of financial figures or value. For instance, calculating the amount of risk focuses on the frequency and severity; but this ignores numerous factors, such as organisational issues like cultural change. Secondly, there is a possibility of losing good corporate customers who believe in long term value (e.g., reputation). This approach could, however, be excused on the premise that a major part of premium comes from retail business. However, it is worthwhile to state that the attitude of the retail customers is likely to change instantly if the predetermined targets are not achieved, because they are not after long-term value. Thus, If their confidence is lost (e.g., a loss of reputation) it would be very difficult to restore. In essence, true value (discounted cash flows) is not short term, but long term (Copeland *et al*., 2000). The ultimate goal of ERM is to help management in achieving corporate objectives (Dickinson, 2001). Successful implementation of ERM can, therefore, introduce a culture of prompt detection of opportunities simultaneously with detection of the risk of bad outcomes (Fadun, 2013c). The study suggests that if the objective is to increase only the shareholder value, then KPIs probably help to illustrate the added value in a tangible form. Nevertheless, the dilemma of value creation still remains; although, this is an intangible issue. The problems of measuring the performance of ERM are similar to the problem of measuring the performance of research and development (R&D). It is generally believed that risk management creates opportunities for R&D and that R&D develops new products, prices, and knowledge; but these are very difficult to cost or value. However, one key success factor is establishing a culture of facilitating a two way dialogue among the internal parties and extending such dialogue to external parties.

Finally, the performance of ERM needs to be justified in terms of (i) how broad, deep, and resilient in terms of shared understanding the risk management culture is; (ii) how strong or efficient the two-way dialogue is (i.e., communication); and finally in terms of (iii) the nature of the organised and coordinated actions. These factors should be considered in order to eliminate or minimise disciplinary barriers (Power, 2004).

6. DISCUSSION: EMERGING THEMES FROM ERM

This section generalises some of the issues which emerged from the above analysis, relates them to relevant literature and establishes a set of important themes associated with the development of ERM in the Nigeria's insurance industry.

6.1 ERM is a General Risk Management Function

In insurance companies risk management should be part of general management so as to maximise the efficiency of productivity (Mehr and Hedges, 1963; Drucker, 1974; Crockford, 1976; Chatterjee *et al.*, 2003). Productivity is, however, only a by-product of scientific risk management; but the immediate goal of risk management is to ensure the security of the firm. Due to the involvement of the finance profession in risk management, the speculative element (embodying possible gain and loss) has become a prominent feature of ERM decision making. Nevertheless, the recent focus on operational risk has brought the pure risk (focusing on potential losses) purpose of risk management more fully into the picture. All these findings indicate that risk management must be embedded into the strategic decision making process. However, this can only be achieved by integrating ERM into general management functions, where risk management remains at the core of more general management. Consequently, for the purpose of effective risk decision making it is important to acquire knowledge relating to (i) the nature of risk (ii) the relationship of risk to management and (iii) the ways of treating risk in an enterprise system (Copeland *et al*., 2000; Fadun, 2013c). Most of the people interviewed were very conscious of the treatment of risk in relation to a specific business line or segments but lacked the knowledge of the other two aspects. The primary emphasis in the insurance industry appears to be using corporate finance as a major device for the treatment of risk. Little attention is given to risk in a more abstract fashion. Attention is usually centred on various types of financial risks, specifically in terms of numerical figures. The strength of such a treatment of risk lies in the attention given to the range of financial risks related to the lines of business, associated with return maximisation. Such an approach seems to manage corporate financial risks as core business risks and ignores other ancillary risks. Nevertheless, the ignored risks still remain in the business; thus, there is a danger of paying insufficient attention to risk as a complicating factor in individual and organisational decision making. All these indicate that the current approach of treating risk within the Nigeria's insurance industry is a narrow focus of a risk; but, ERM should provide a larger picture. Consequently, to achieve this, risk management needs contributions from a range of disciplines (Haimes *et al*., 2002; Ward, 2003).

6.2 Behavioural Phenomena Associated with Risk Management

As indicated above, the survey suggests that economic and financial principles are not enough to solve all challenges of ERM. The study revealed that risk taking and management involve emotions such as anxiety, fear, stimulation and joy (Hillson, and Murray-Webster, 2007; 2011). Importantly, psychology should be considered jointly with economics and financial aspects of risk (Shanteau, 2000). Although managers take risks and exhibit risk preferences as observed in insurance companies in Nigeria do not recognise this. Each risk perspective is a subset of a large and complex field of uncertainty (Kloman, 2003; Ward and Chapman, 2003) and this prevents decision makers from seeing the big picture (Slovic *et al*., 2004). One of the roles of ERM should be to provide this larger picture. Another important issue relates to the ownership of risks. The key question here is who is responsible for what risk. It is also necessary to link such accountability with the measurement of individuals' performance and with the performance of ERM.

6.3 Shareholder Value versus Stakeholders' Interest

The study revealed that maximisation of shareholder value as well as maintaining liquidity and solvency are paramount goals of ERM in insurance companies in Nigeria. If the ERM model is built on the framework of corporate risk management which suggests that shareholders (in their capacity as owners) are only providers of capital, this should ensure

that the maximum sustainable return is the primary function of ERM. From a corporate finance perspective, risk management is crucial to creating shareholder value. This is because risk information, based on economic capital, is a required input for accurate capital budgeting, capital structuring, capital allocation, and risk adjusted performance calculations (Belmont, 2004). Hence, satisfaction of policyholders is maintained mainly in terms of the fulfilment of contractual obligations. Moreover, it involves ensuring a certain minimal level of cash flow to preserve the targeted credit rating. However, such a narrow focus on shareholder value under ERM is questionable when the objective is to serve a broader group of stakeholders.

Furthermore, the current economic situation has led to shareholders' faith in organisations to be progressively weakened by corporate crises and financial scandals. It is relevant to argue that the generation of economic value is beneficial, but not a sole element for running a business (Marsiglia and Falautano, 2005). This suggests that risk management efforts of the insurance industry are based on the assumption that a company's initiative in risk management is not a value adding function, though passively and unintentional (Verbrugge, 2003). However, this tension is given some relief from the finance literature, since it indicates that increasing shareholder value does not conflict with the long term interest of other stakeholders (Copeland *et al*., 2000). Additionally, a further area of conflict arises from corporate finance. First, one concept focuses on the capital market through financial economists' theories based on efficient market assumptions (Prahalad, 1994); whilst, another focuses on corporate social responsibility through stakeholder theory based on culture and ethics (Gamble and Kelly, 2001; Omran *et al*., 2002; Smith, 2003; Drew *et al*., 2006).

The foregoing arguments reveal that there is a conflicting outlook amongst staff from various disciplines concerning the objectives of ERM. An embracing objective to overcome these conflicts is necessary and this indicates that "interest of stakeholders" is the ultimate objective for ERM.

6.4 Specialist versus Generalist

The interview survey discovered the distinction between the specialist and the generalist as a key issue in promoting ERM. The major concern is that specialists (e.g., underwriters, actuaries, financial managers, etc.) are often blinded by the perceived wisdom of their discipline and fail to realise the benefits of a broader perspective. Moreover, specialists tend to be overconfident and rigid in their views even when dealing with conflicting opinions from specialists in other disciplines (Otway, 1992). Consequently, one of the demerits of such a one sighted view is that it may not consider subjective risks, even if it focuses on objective risk. Traditionally, financial specialists and actuaries tend to solve problems based on their professional background, principles, and training. However, specialists placed in the position of Chief Risk Officer (CRO) are compelled to see the broader picture of risk which is often beyond their professional boundaries (Dickinson, 2001; Liebenberg and Hoyt, 2003; Dickinson, 2005). For instance, actuaries who are expert in working with historical data are often unaware of the principles of other subjects such as organisational behaviour. ERM should, therefore, integrate financial risks with operational and strategic risks. Fortunately, there is evidence that individual professions are beginning to realise their limitations (James, 1968; Wang, 2004). The study identifies that effective communication across disciplines is the core requirement to dealing with a wider community of stakeholders when implementing ERM (Nielson *et al*., 2005). These arguments indicate the need for a person, or a group of

people, who can see the holistic picture of risk within and outside of the organisation. Unfortunately, often only one person has such an opportunity, and that is the CEO. This is why the CEO is the ultimate CRO. Such responsibilities establish the ideal CRO as a strategist having knowledge of all risks, irrespective of source and type (Hood, 1996; Power, 2005). Hence, the role of a CRO is closely related to each layer of ERM (i.e., harmonisation, standardisation, integration, and centralisation) as discussed earlier in subsection 5.1 above. However, the current practice in the Nigeria's insurance industry does not support this approach. Rather, a silo type risk management is adopted and try to practice ERM within the broader scope of a specific disciplinary silo. In fact, the various disciplines, while contributing to ERM, bring their own silo-type histories and believe themselves to be the most important perspective. Consequently, they each attempt to take control. As a result, ineffective communication between the generalists and specialists does not enable them to connect effectively with, or to alter, each other's opinions (Skipper, 2005). The study, however, suggests that CROs should have an interdisciplinary background and they should reflect a broad body of knowledge (Ward, 2001).

7. CONCLUSION

ERM is an emerging topic that is gradually maturing. Among others, ERM growth is influenced by at least two perspectives: a finance-driven shareholder value model; and a compliance-driven risk governance model (Dickinson, 2001; Lam, 2003; Power, 2004; Dickinson, 2005). The literature suggests that ERM is an interdisciplinary subject and needs to be handled from a variety of disciplinary perspectives (e.g., finance, economics, psychology and philosophy, etc). However, the study concludes that ERM, as currently practiced by insurers in Nigeria, still remains a subject of a single discipline (finance). The study, however, identifies two key principles of effective ERM in insurance companies: (i) ERM should ensure continuous solvency of insurers, even at the moment of crisis; and (ii) ERM should encourage organisations to accept more risks consciously in achieving their corporate goals. Moreover, the picture of ERM which emerges from the study does not deny rationality, but views ERM in terms of market and regulatory pressure, which the study views as momentary phenomena of time. Above all, the study suggests that a complete, effective ERM system for insurance companies needs a certain degree of interdisciplinary treatment.

Specifically, the paper addresses four research questions, and in-depth analysis of the ERM as practiced by insurance companies in Nigeria reveals the following:

1. There exists an inconsistent understanding of ERM within insurance companies in Nigeria. Most companies believe ERM involves the management of "all risks" but the definition of "all risks" varies significantly from one company to another and from one discipline/profession to another within a company.
2. The study identified a range of interrelated motivators for developing ERM in insurance companies. The most important of these appears to be regulations (solvency and corporate governance), and the leadership of CEO. Likewise, market competition and organisation's size influence both regulations and the actions of the CEO. Consequently, the ultimate driver of ERM might be the growing size of the organisation and the market competition. Whilst competition influences organisations to consider short term strategy (motivating them to take more risks), regulations intend to ensure the capacity of the insurers to maintain the promises they have made to their consumers. Moreover, regulations stimulate ERM in insurance companies because without the influence of regulations they might not have developed ERM or at least not with high level of commitment.

3. Communication and cultural barriers are the key operational challenges to implementing ERM. Similarly, risk measurement and inadequate data are the key technical challenges to the effective implementation of ERM.
4. Insurance companies in Nigeria have not found effective means of measuring the performance of ERM; and whether the performance of ERM is measured *ex-ante* or *ex-post* remains a key issue for organisations.

In conclusion, the literature suggests that ERM is an interdisciplinary subject and requires the joint application of mathematics, social sciences, and law (Althaus, 2005). More specifically it requires the joint effort of financial risk management and strategic management, which are emerging in the convergence of shareholder value models and risk governance models towards corporate reputation management. However, this approach is far from the reality of the ERM practiced in the Nigeria's insurance industry. Moreover, the design of ERM is highly company specific and depends on several factors (i.e., the business model in terms of type of business, geographical presence, etc.). It also depends on the risk appetite of the organisation, which includes both qualitative and quantitative elements.

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