

# **RISK MANAGEMENT AND RISK MANAGEMENT FAILURE: LESSONS FOR BUSINESS ENTERPRISES**

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## **Abstract**

*The recent economic volatility gives risk management a new focus and eminence. Successful firms are able and willing to effectively integrate risk management at all levels of management process. The purpose of the study is to highlight the importance of effective risk management (ERM) in preventing risk management failure. Risk management failure prevents firms' from meeting their expectations; thus, results to repeated business and project failures. Although the degree of risk management actions varies among firms; ERM ensures that firms' attain their corporate objectives. Using the literature, the paper highlights that knowledge of risk management is essential in business enterprises. It describes risk and risk management; explores importance and benefits of ERM to business enterprises; highlights reasons why enterprises manage risks. It also examines failure of risk management, causes of such failures, and how to minimise such occurrence. The author concludes that risk management failures can be categorised into two: operational failure and operators' failure. The implication for practice suggests that risk management is an integral part of the decision-making process and ERM can improve business performance, thereby minimising possibilities of business failures in Nigeria.*

**Key words:** Risk, Risk Management, Effective Risk Management, Risk Management Failure, Business Enterprises, Nigeria

## **1 INTRODUCTION**

Risk is an essential part of business because firms cannot operate without taking risks. Risk is commonly associated with uncertainty, as the event may or may not occur. Risk implies exposure to uncertainty or threat (Kannan and Thangavel, 2008); and 'a decision to do nothing

explicitly avoids the opportunities that exist and leaving the threats unmanaged' (Hillson and Murray-Webster, 2007:26). Traditionally, risk has been viewed as negative consequences and unfavourable events. The consideration of risk from the negative perspective is restrictive and misleading for two main reasons. First, uncertainty may manifest in either negative (threat) or positive (opportunity) form, or both; and second, the way a risk is perceived influences the manner in which it is handled (Hillson, 2002). Managing risks from negative perspective may result to complete omission of opportunities (benefits/gains) in the event being considered. However, perspectives on risk differ, as the risk definition depends on and is affected by the risk observer (Kelman, 2003). Moreover, risk sometimes entails some economic benefits, as firms may derive considerable gains by taking risk. Business grows through greater risk taking (Drucker, 1997). Risk is, therefore, integral to opportunities and threats which may adversely affect an action or expected outcome (Kaye, 2009; Lowe, 2010). Moreover, getting rid of risk undermines the source of value creation; thereby truncates potential opportunities (Knight and Petty, 2001; Grazino and Aggarwal, 2005; Garvan, 2007). In essence, to business enterprise risks are 'uncertainty that matter' (Hillson and Murray-Webster, 2011:19).

## **2 SCOPE, OBJECTIVES AND SIGNIFICANCE OF STUDY**

The study highlights the importance of effective risk management (ERM) in order to prevent risk management failure and to ensure that business enterprises in Nigeria attain their corporate objectives. Risk management failure prevents organisations from meeting their expectations; thus, resulting to repeated business and project failures. Specifically, objectives of the study include:

- a) To describe risk and its impact on business enterprises;
- b) To examine risk management and its role in attaining corporate objectives;
- c) To highlight reasons why business enterprises manage risks;
- d) To outline benefits of ERM to business enterprises; and
- e) To explore risk management failure and causes of risk management failure.

Despite the benefits of risk management, not many business enterprises maintain ERM in Nigeria. Moreover, there is dearth of study on risk management in business enterprises in Nigeria. The available studies on risk management in Nigeria focused mainly on the Nigerian banking industry (Garuba, 2010; Adeyemi, 2011; Njogo, 2012; Ugoani, 2012). Thus, there is limited literature on risk management in business enterprises and risk management failure in Nigeria. The study fills the gap and contributes to knowledge by broadening the scope of literature on risk management and risk management failure in business enterprises in Nigeria. Consequently, the study is imperative in order to increase knowledge on risk management, its importance, and the need to minimise risk management failure in business enterprises in Nigeria, thereby improving the nation's economy.

### **3 METHODOLOGY**

The literature is the main source of information employed for the study. The study explores the literature on risk, risk management, risk management failure and other relevant areas in order to highlight lessons for business enterprises in Nigeria. The significance of the result obtained from the literature is deemed sufficient to establish the study rationale, importance and benefits of risk management; as well as the need to avoid failure of risk management in business enterprises in Nigeria.

### **4 THEORETICAL FRAMEWORK**

Risk permeates firms' economic activities, because risk is the lifeblood of every organisation (Shimpi, 2001). Successful firms manage risk effectively, while those that do not suffer. Risk has no universal definition; hence, variability of outcomes is a common way of expressing risk (Skipper, 1997). Although definitions risk varies; risk has two dimensions or components: uncertainty and consequences. Consequently, risk can be described in terms of its effect (positive or negative) on objective (Hillson and Murray-Webster, 2004; Damodaran, 2008; Kannan and Thangavel, 2008). The recent global events (from the global financial crisis to the ensuing market volatility, decline in consumer confidence, and extreme fluctuations in energy prices) have demonstrated that uncertainty permeates firms' operations. Likewise, financial

failures observed during global financial crisis also highlight the importance of ERM (Coşkun, 2012). Notwithstanding the presence of risk and uncertainty in firms' operations; uncertainty and risk have not been effectively managed by many firms' in Nigeria. Performance and risk are inextricably linked. By establishing a consistent and disciplined process for managing risks, firms' can improve the predictability of their results. ERM can earn firms' better ratings and allows them to take advantage of lower costs of capital.

Furthermore, the recent economic volatility has given risk management a new focus and eminence. Successful firms' are able and willing to effectively integrate risk management at all levels of management process from strategy to success. Risk management is an invaluable tool for managing uncertainty associated with business. Business enterprises have always practice some forms of risk management, implicitly or explicitly (Meulbroek, 2002). The concept of risk management is, therefore, not so new because risk management techniques like: risk reduction through safety; quality control and hazard education; alternative risk financing; and insurance, including self-insurance and captive insurance, have been in existence for a long time (Doherty, 2000). Regrettably, organisations in Nigeria have been hampered by pitfalls in traditional approaches to risk management, as risk management is rarely undertaken in a systematic and integrated manner across firms. Traditional risk management views risk as a series of single and unrelated elements where individual risk are categorised and managed separately (Wolf, 2008; Hoyt and Liebenberg, 2011). The major deficiency of traditional approach to risk management is the narrow focus on threats, rather than focusing on both opportunities and threats. The holistic approach to managing a firm's risks differs substantially from historical practice, as typical firm's tends to aggregate risk (effective risk management), rather than isolating them (traditional risk management) (Wolf, 2008; Hoyt and Liebenberg, 2011). ERM engages risks across a variety of levels in the organisation; thus focusing on both opportunity and threat. However, in the literature, ERM has similar meaning with Enterprise Risk Management (ERM), 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; Liebenberg and Hoyt, 2003;

Kleffner *et al.*, 2003; Gupta, 2004; Hoyt and Liebenberg, 2006; Manab *et al.*, 2007; and Yazid *et al.*, 2009).

Risk management is not a process for avoiding risks. Risk management does not eliminate risks, but manages risks associated with firms' operations, thereby maximises opportunities and minimises threats. Several processes and frameworks have been developed in recent years to promote ERM in both developed and developing economics. Generally, the main stages of ERM, as shown in Figure 1, are: context analysis; risk identification; risk analysis; risk evaluation; risk treatment; monitoring and review; and communication and consulting.

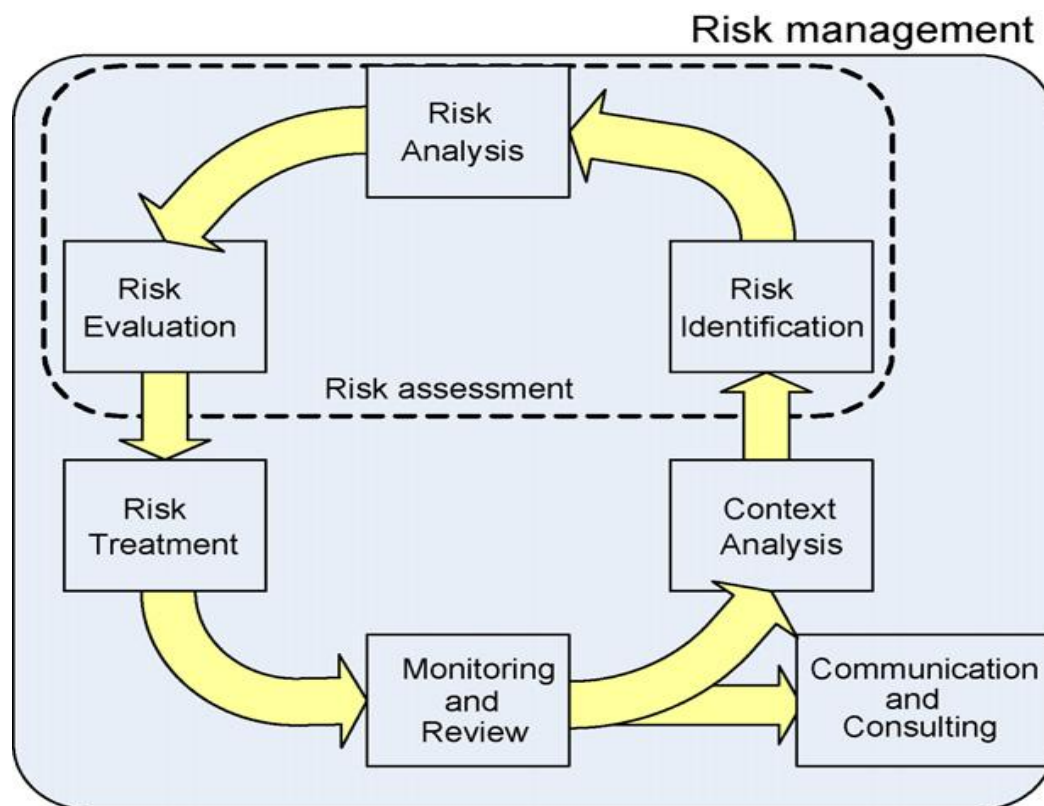


Figure 1: Stages of effective risk management

Firms' focus varies, as they are subject to different types of risks. Similarly, the degree of risk management actions varies among business enterprises, subject to corporate risk culture and risk appetite. The fundamental difference is that corporate risk culture is a chosen response;

while, corporate risk appetite exists as a tendency independent of human choice (Hillson and Murray-Webster, 2011). The success of a firm depends upon ERM (Jorion, 2001; 2009). ERM can align with the business assumptions and proactively help in overcoming the possibilities of the business failures (Gupta, 2011). Likewise, ERM reduces earning volatility, maximises value for shareholders, and promotes job security and financial security in the organisation (Lam, 2001). Meanwhile, Oracle (2009) identifies four factors which have contributed to the relative immaturity of risk management in most organisations: lack of executive commitment to risk management; fragmented risk management activities; viewing risk management from historical, not predictive, perspective; and lack of alignment among corporate strategy, strategic planning, and risk management. To further appreciate the importance of ERM in business enterprises, it is relevant to examine 'reasons why business enterprises should effectively manage their risks' and 'benefits of ERM to organisations'. These are considered below.

#### 4.2 Why Business Enterprises Should Manage Risks?

Business enterprises in Nigeria should manage risks by implementing and maintaining ERM because:

- Evolution of several risks from events around the world. It is necessary that firms' should effectively manage these risks in order to survive in the global dynamic business environment;
- People are more aware of the level of service to expect, and the recourse they can take if they have been wronged;
- People are now more likely to sue firms for damages. Taking the steps to reduce injuries could help in defending against a claim;
- Courts are often sympathetic to injured claimants and give them the benefit of the doubt. Thus, organisations are held to very high standards of care;
- Organisations are perceived as having a lot of assets and/or high insurance policy limits to take care of damages and liability towards customers and third party; and

- Organisations are vicariously liable, i.e. being held liable for the actions of their employees, volunteers and contractors (Gupta, 2011; Lam, 2001; Coşkun, 2012).

#### 4.2 Benefits of ERM to Business Enterprises

Risk management provides a clear and structured approach to identifying, measuring and prioritising risks in order to take appropriate actions to minimise losses. An ERM practice does not eliminate risks, but minimise risks. However, implementation and maintenance of ERM indicates that a firm is committed to improved business processes efficiency. The benefits of ERM to organisation include:

- Saving resources: time, assets, income, property and personnel;
- Protection of an organisation reputation and public image;
- Prevention or reduction of legal liabilities;
- Increasing the stability of operations and promoting continuous improvement;
- Protecting people and environment from harm;
- Avoiding fines for corporate non-compliance with regulations and legislation;
- Enhancing the ability to prepare for unforeseen and unexpected circumstances;
- Enhancing competitive advantage through improved decision support and market intelligence based on more accurate risk-adjusted management information;
- Improved shareholder value and confidence, which is especially valuable in times of crisis when shareholder trust is stressed to its maximum limits; and
- Assisting in clearly defining suitable risk management techniques, including insurance needs (Meulbroek, 2002; Hillson, 2006; Protiviti, 2006).

## 5 RISK MANAGEMENT FAILURE

ERM is a proactive approach to minimise threats, maximise opportunities, and optimise achievement of objectives (Pearce and Robinson, 2000; Hillson and Murray-Webster, 2004; Gray and Larson, 2006; Rejda, 2011). Basically, managing a business successful entails minimising bad risks and taking advantage of good ones. Consequently, organisational threats cannot be completely eliminated; hence, the best managed business may still experience losses



due to unaccounted threats. Three examples of otherwise successful companies that fell victim to some unmitigated risks are: JPMorgan, Merrill Lynch and MF Global. The financial institution's London branch made a bet on illiquid corporate credit-derivative indices to help manage overall exposure to markets. The trades ended up costing JPMorgan nearly \$6 billion and resulted in a severe hit to its public reputation. The backlash was so severe that the company's chief information officer left the company (Lundgren, 2012). Similarly, in 2007 and 2008 Merrill Lynch lost approximately \$30 billion on the back of soured mortgage investments due to risk management failure. Consequently, the company was sold Bank of America. In addition, In 2009 Bank of America Chief Officer was forced to step down because he was not transparent with investors as to the severity of Merrill Lynch's financial situation (Lundgren, 2012). Likewise, MF Global was accused in 2011 of misappropriating \$1.6 billion of customer money as it filed for bankruptcy. This was after revelations of large exposures to troubled European bonds (spurred) credit-rating agencies to slash its rating (Lundgren, 2012). This further emphasizes the importance of ERM, and firms' need to engage tools at their disposal to prevent threats from damaging their business.

In practice, risk management often fails to meet expectations, as demonstrated by repeated business and project failures. Business enterprises in Nigeria are not exempted from such failure. Foreseeable threats can result to problems and crises; while, achievable opportunities can mislead to loss of benefits (Hillson and Murray-Webster, 2007). ERM addresses risk across a variety of levels in the organisation, including strategy and tactics, covering both opportunities and threats (Hillson, 2006). However, the best risk management framework does not protect firms from consequences of risk (Landier *et al.*, 2009; Bozek and Tworek, 2011). The growing interest in risk management is the result of a number concurrent secular trend. The recent tumult in credits and financial markets has drawn attention to the risk management function. The number, type, and extent of both financial and non-financial firms' exposures have also increased significantly. Consequently, risk management has failed to play its roles in the period that led to the current crisis (Missal and Richman, 2008; Landier *et al.*, 2009; Golub and Crum,



2010). Hillson and Murray-Webster (2004:1) argue that the most significant critical success factor for ERM is 'an appropriate and mature risk culture'.

Risk management, even if flawlessly executed, does not guarantee that large losses will not occur (Kimball, 2000; Stulz, 2008; Hubbard, 2009; Jorion, 2009). In spite of all risk management measures, a number of firms (e.g. JPMorgan, Merrill Lynch and MF Global) incurred large losses during the credit and financial crises. Can we then conclude that the firms risk management system was flawed? Matei *et al.* (2012) assert that companies fail due to unexpected losses generated by three categories of causes: insufficient capital (due to the huge dimension of losses which exceed the socially acceptable hurdle for insolvency); model errors (i.e. misestimating of outcomes distribution due to errors occurred in risk measurement); and risk ignorance (i.e. firms' ability of managing their equity capital and measure their exposures is directly linked to their capacity of acting as buffers against errors in risk management). Similarly, Kimball (2000) states that risk mitigation and management system can fail for more subtle and indirect reasons. He identifies three major reasons why risk management fails: agency risk; shift or changes in the form or risk; and incremental failure (Kimball, 2000). Firstly, according to him, perhaps the best known reason for failure of risk management system is agency risk. Agency risk refers to the risk that a manager or employee, inadvertently or purposefully, fails to follow policies or procedures designed to mitigate and manage risks (Kimball, 2000). Secondly, there is tendency for risk to shift or change form. While a firm may mitigate its risk by hedging or purchasing insurance, these actions do not reduce systematic risk in the economy. Systematic risks (sometimes identified as uncontrollable or unavoidable risks) are risks associated with the overall market or the economy. Such risks are outside the control of the firms operating in the market or the economy. Thus, hedging or purchasing insurance does not really eliminate risk, but simply transforms the nature of the risk (Kimball, 2000). Thirdly, there is tendency for risk management process to fail incrementally over a long period of time. The incremental failure is often caused by a long incubator period arising from a gradual degradation of the risk management processes, which accumulate over a long period of time (Kimball, 2000). However, risk management incremental failure can be avoided through

regular review of risk exposures and the risk management framework (Grabowski and Roberts, 1997; Kimball, 2000; Charette, 2002; Bozek and Tworek, 2011).

Whilst examining lessons from credit crisis, Jorion (2009:5) classifies risks into three categories: “known knowns”, “known unknowns”, and “unknown unknowns”. First, according to him, “known knowns” refer to a flawless risk measurement system, where all the risks are perfectly measured (Jorion, 2009:6). This implies that the risk manager adequately identifies and measures all the firm risk factors and exposures. Second, the “known unknowns” categories of risk are the numerous blind spots, broadly categorised as model risk (Jorion, 2009:6). Model risk can arise in three major ways, where: (1) the risk manager could have ignored important risk factors; (2) the distribution of risk factors could be measured inaccurately; and (3) the mapping process, which consists of replacing positions with exposures on the risk factor, could be incorrect (Jorion, 2009). Third, “unknown unknowns” are the categories of risks or events that are totally outside the scope of most scenarios; thus constitute different levels of uncertainty (Jorion, 2009:6). In essence, the unknown unknowns are highly volatile risks, such as regulatory risks or structural risks, which affect the entire industry. Likewise, Hubbard (2009) states that when risk management has failed, this implies that one of the following ten general causes occurred: (1) confusion regarding the concept of risk; (2) completely avoidable human errors in subjective judgments of risk; (3) entirely ineffectual but popular subjective scoring methods; (4) misconceptions that block the use of better, existing methods; (5) recurring errors, in even the most sophisticated models; (6) institutional factors due to unnecessary isolation of risk analysts from each other - both within the same organisation and among organisations; (7) unproductive incentive structures; (8) except for certain quantitative methods in certain industries, the effectiveness of risk management is almost never measured; (9) some parts that have been measured do not work; and (10) some parts that do work are not used. Similarly, while discussing the typology of risk management failures, Stulz (2008) emphasises that two types of mistakes can be made in measuring risk: known risks can be mismeasured; and some risks can be ignored, either because they are unknown or viewed as not material. Moreover, ignored risks can take three forms, which have different implications for a firm. First, a firm may

ignore a risk even though that risk is known; second, somebody in the firm may know about a risk but fail to disclose such risk, thus the risk is not captured by the firm's risk models; and third, there is a realisation of a truly unknown risk (Stulz, 2008). Once risks have been identified and measured, they should be communicated to the firm's managers. Failure to communicate risk to the management can result to failure of risk management. In essence, these failures suggest that we still take unnecessary risks within risk management itself.

Consequently, risk management failure can be classify into six. According to Stulz (2008), these include:

- Mismeasurement of known risks;
- Failure to take risks into account, i.e. mismeasurement due to ignored risk;
- Failure in communicating the risks to top management;
- Failure in monitoring risks;
- Failure in managing risks; and
- Failure to use appropriate risk metrics or measurement system.

Having considered factors which may be responsible for failure of risk management (Kimball, 2000; Stulz, 2008; Hubbard, 2009; Jorion, 2009); it is therefore relevant to state that the causes of risk management failure can be categorised into two: operational failure and operators' failure.

### 5.1 Operational Failure

Operational failure arises from development and execution of risk management framework or system. To minimise operational failure, the adopted risk management framework must be realistic, workable and clearing describe: what is and what is not a part of the framework, what to be done, those responsible for actions, and the manner it should be done. Operational failures can further be classified into two: (i) faulty system, i.e. inadequate or defective framework, and (ii) inadequate *modus operandi* (mode of operation) – arising from ineffective and inefficient mode of operation. *Modus operandi* here means a method of procedure that

indicates the manner and methods of operating the risk management framework. A firm risk management will surely fail if an inappropriate risk management model is adopted, or a defective risk management model is developed for use in the firm. Moreover, an effective and efficient *modus operandi* facilitates proactive risk management and attainment of a firm's objectives. The best risk management system can be marred by ineffective and inefficient *modus operandi*. Also, to ensure that risk management expectations are achieved, its *modus operandi* must be adequately documented, executed, and reviewed regularly. Finally, risk management system must be tailored to adequately manage individual firms peculiar risk exposures.

## 5.2 Operators' Failure

Operators' failure arises from a firm's managers' errors or misconducts. Risk management is a proactive approach to minimise threats, maximise opportunities, and optimise achievement of objectives (Pearce and Robinson, 2000; Hillson and Murray-Webster, 2004; Gray and Larson, 2006; Rejda, 2011). Hence, a firm's risk management operators' (managers) can contribute to failure of risk management. However, risk perception is responsible for the disagreements about the best way of managing risk (Finucane *et al.*, 2000; Coyle, 2002; Slovic and Weber, 2002; Weber *et al.*, 2002). Consequently, operators failure can be influenced by three basic, individual and corporate, factors: risk attitude, risk culture, and risk appetite. One of the reasons responsible for the failure of operators' failure is the attitude that individuals or groups of people hold towards the perception of threats and opportunities (Hillson and Murray-Webster, 2007; Damodaran, 2008). Risk attitude is a chosen state of mind regarding uncertainties which could impact, positively or negatively, on objectives (Hillson and Murray-Webster, 2007). Risk attitude to a particular situation vary from person to person, team to team, organisation to organisation, and nation to nation. Hence, a firm's attitude towards risk determines its management perspective on taking risks in achieving the corporate objective (Coyle, 2002). Risk culture also affects how humans perceive risks, as it serves as interpretive filters which influences how human understand and describe the world (Arnoldi, 2009). Culture is a set of values and meanings which shape our perception of what constitute the biggest

potential dangers; and it forms the basis for our reasoning about the solution (Arnoldi, 2009). Risk culture entails the prevalent attitudes and beliefs of organisations' staff; i.e. the shared beliefs, values and knowledge of a group about risk (Levy *et al.*, 2010; Hindson, 2011; Yates, 2011). Similarly, risk appetite is governed by how risk taking is perceived, communicated and rewarded (Hillson and Murray-Weber, 2007; Hindson, 2011). Consequently, to minimise risk management failure, firms operators (managers) must develop and articulate good corporate risk attitude, risk culture and risk appetite. This is necessary as good risk attitude, strong risk culture and clearer risk appetite play critical role in determining a firm's health and performance (Levy *et al.*, 2010; Hillson and Murray-Webster; 2011).

## **6 CONCLUSIONS**

Risk management does not eliminate risk, but provides a platform for managing business enterprises risks in order to minimise threats, maximise opportunities, and optimise achievement of objectives (Pearce and Robinson, 2000; Hillson and Murray-Webster, 2004; Gray and Larson, 2006; Rejda, 2011). The traditional risk management approach is being replaced with ERM approach in many organisations. This is largely due to limitations of the traditional approach to risk management which focusing on the threats, rather than focusing on both opportunities and threats. Risk sometimes entails some economic benefit, as firms may derive considerable gains by taking risk. Hence, risk is integral to opportunities and getting rid of risk undermines the source of value creation. Although the degree of risk management actions varies among firms; ERM ensures that firms' attain their corporate objectives. The study highlights the importance of ERM in business enterprises. It describes risk and risk management; explores the importance and benefits of ERM to business enterprises; highlights reasons why enterprises manage risks. It also examines failure in risk management, causes of such failures, and how to minimise such occurrence. It emphasises that risk management is not a process for avoiding risk; rather, it facilitates effective risk handling.

ERM assist business enterprises to proactively overcome possibilities of firms' failures. ERM does not prevent losses, but provides a platform for firms to better manage their risks. The

implication for practice is that risk management is an integral part of the decision-making process; and ERM can improve business performance and minimise possibilities of business failures. Risk management does not mean always getting things right; instead, it means getting them less wrong, less often, with less damaging consequences (Buchler *et al.*, 2008). The author concludes that risk management failures can be categorised into two: operational failure and operators' failure. Consequently, appropriate risk management framework and adequate *modus operandi* are necessary to facilitate effective and efficient risk management in business enterprises in Nigeria. However, not every loss reflects a risk management failure. Nevertheless risk management must be continuously implemented and improved in business; and be treated as a separate aspect of corporate management in Nigeria.

Finally, the paper focuses on effective risk management. There are several factors, internal and external, which can influence risk management practices in business enterprises. Such factors, internal and external, need greater attention by way of practice evaluation of their influence on risk management activity within organisations. Hence, future studies can examine and evaluate relationship between corporate governance, corporate social responsibility and risk management in Nigeria.

## References

Adeyemi, B. (2011). Bank failure in Nigeria: A consequence of capital inadequacy, lack of transparency and non-performing loans? *Banks and Bank Systems*, 6(1), 99-109.

Arnoldi, J. (2009). *Risk*. Cambridge: Polity.

Bozek, S. and Tworek, P. (2011). *Risk management standardisation in entrepreneurship*.

International Scientific Conference on Financial Management of Firms and Financial Institutions, Vsb-Tv Ostrava, pp. 1-10. Retrieved 23 April 2012, from:

<http://www.ekf.vsb.cz/miranda2/export/sites->

[root/ekf/konference/cs/okruhy/frpfi/prispevky/prispevky\\_plne\\_verze/Bozek.Tworek\\_2u\\_prav.pdf.](#)

Buchler, K., Freeman, A., & Hulme, R. (2008). *The risk revolution*. New York, NY: McKinsey & Company.

Charette, R. N. (2002). *The state of risk management 2002: Hype or reality?* Arlington, MA: Cutter Information.

Coşkun, Y. (2012). Financial failure and risk management. *Sermaye Piyasası Dergisi*, 10(2), 100-109.

Coyle, B. (2002). *Risk awareness and corporate governance*. Kent: Financial World.

Damodaran, A. (2008). *Strategic risk taking: A framework for risk management*. Upper Saddle River, New Jersey: Prentice Hall.

D'Arcy, S. P. (2001). Enterprise risk management. *Journal of Risk Management of Korea*, 12(1), 207-228.

Doherty, N. A. (2000). *Integrated risk management - Technologies & strategies for managing corporate risk*. New York, NY: McGraw-Hill.

Garuba, A. O. (2010). Credit risk management in the Nigerian banking industry. *Journal of Research in National Development*, 8(2). Retrieved 24 December 2012, from: <http://www.transcampus.org/JORINDV8Dec2010/JournalsV8NO2Dec201028.html>.

Garvan, J. R. (2007). Risk management: The unifying framework for business scholarship. *Risk Management and Insurance Review*, 10(1), 1-12.



Golub, B. N., & Crum, C. C. (2010). Risk management lessons worth remembering from the credit crises of 2007 - 2009. *The Journal of Portfolio Management*, Spring 2010, 21-44.

Gray, C. F., & Larson, E. W. (2006). *Project management: The managerial process* (3<sup>rd</sup> ed.). New York, NY: Irwin/McGraw-Hill.

Graziano, C., & Aggarwal, R. (2005). C-Suites gaining another member. *Financial Executive*, 21(7), 42-44.

Drucker, P. F. (1977). *Management - An abridged and revised version of management: Tasks, responsibilities, practices*. London: Pan Books.

Finucane, M. L., Slovic, P., Mertz, C. K., Flynn, J., & Satterfield, T. A. (2000). Gender, race, perceived risk: The white male effect. *Health, Risk and Society*, 2, 159-172.

Grabowski, M., & Roberts, K. (1997). Risk mitigation in large-scale systems: Lessons from high-reliability organisations. *California Management Review*, Summer 1999, 152-159.

Gupta, P.K. (2004). Enterprise risk management - sub-optimality to optimality. *Journal of Insurance & Risk Management*, 2(4).

Gupta, P. K. (2011). Risk management in Indian companies: EWRM concerns and issues. *The Journal of Risk Finance*, 12(2), 121-139.

Hillson, D. (2002). What is risk? Towards a common definition. Inform: *Journal of the Institute of Risk Management*, 11-12. Retrieved 22 April 2012, from: <http://www.risk-doctor.com/pdf-files/def0402.pdf>.

- Hillson, D. (2006). *Integrated risk management as a framework for organisation success*. PMI Global Conference proceedings, Seattle USA. Retrieved 22 April 2012, from: <http://www.risk-doctor.com/pdf-files/adv13.pdf>.
- Hillson, D. A., & Murray-Webster, R. (2004). *Understanding and managing risk attitude*. Retrieved 23 April 2012, from: <http://www.kent.ac.uk/scarr/events/finalpapers/Hillson%20%2B%20Murray-Webster.pdf>.
- Hillson, D. A., & Murray-Webster, R. (2007). *Understanding and managing risk attitude* (2<sup>nd</sup> ed.). Aldershot, UK: Gower.
- Hillson, D. A., & Murray-Webster, R. (2011). Using risk appetite and risk attitude to support appropriate risk taking: A new taxonomy and model. *Journal of Project, Program & Portfolio Management*, 2(1), 29-46.
- Hindson, A. (2011). Developing a risk culture. *Risk Management Journal*. 12, 28-29.
- Hoyt, R. E., & Liebenberg, A. P. (2006). *The value of enterprise risk management: Evidence from the U.S. insurance industry*. Retrieved 12 April 2012, from: [http://www.aria.org/meetings/2006papers/Hoyt\\_Liebenberg\\_ERM\\_070606.pdf](http://www.aria.org/meetings/2006papers/Hoyt_Liebenberg_ERM_070606.pdf).
- Hoyt, R. E., & Liebenberg, A. P. (2011). The value of enterprise risk management. *The Journal of Risk and Insurance*, 78(4), 795-822.
- Hubbard, D. W. (2009). *The failure of management: Why it's broken and how to fix it*. Hoboken, New Jersey: John Wiley.

Jorion, P. (2001). *Value at Risk – The new benchmark for managing financial risk*. New York, NY: McGraw-Hill.

Jorion, P. (2009). Risk management lessons from the credit crisis. *European Financial Management*, 2009, 1-20. Retrieved 23 April 2012, from:  
<http://merage.uci.edu/~jorion/papers%5CRiskMgtCreditCrisis.pdf>.

Kannan, N., & Thangavel, N. (2008). Risk management in the financial services industry. *Academic Open Internet Journal*, 22(7). Retrieved 14 April 2012, from:  
<http://www.acadjournal.com/2008/V22/part7/p1/>.

Kaye, B. (2009). *Risk management*. London: The Chartered Insurance Institute.

Kelman, L. (2003). Defining risk. *Flood Risk Net Newsletter*, 2, 6-8.

Kimball, R. C. (2000). Failures in risk management. *New England Economic Review*, January/February, 1-12.

Kleffner, A. E., Lee, R. B., and McGannon, B. (2003). The effect of corporate governance on the use of enterprise risk management: Evidence from Canada. *Risk Management and Insurance Review*, 6(1), 53-73.

Knight, R. F. and Petty, D. J. (2001). Philosophies of risk, shareholder value and the CEO. In: R. J. Chapman, *Simple tools and techniques for enterprises risk management*. London: John Wiley.

Landier, A., Sraer, D., & Thesmar, D. (2009). Financial risk management: Where does independence fail? *American Economic Review*, 99(2), 454-458.

- Lam, J. (2001). *Risk management - The CRO is here to stay*. New York, NY: Prentice-Hall.
- Levy, C., Lamarre, E., & Twining, J. (2010). *Taking control of organisational risk culture*. New York, NY: McKinsey & Company.
- Liebenberg, A. P., & Hoyt, R. E. (2003). The determinants of enterprise risk management: Evidence from the appointment of chief risk officers. *Risk Management and Insurance Review*, 6, 37-52.
- Lowe, S. W. (2010). *Risk management*. London: The Chartered Insurance Institute.
- Lundgren, M. (2012). *Three critical financial industry market failures*. Retrieved 24 December 2012, from: <http://www.bpsresolver.com/three-critical-financial-industry-risk-management-failures/>.
- Manab, N. A., Hussin, M. R., & Kassim, I. (2007). *Empirical study on theory and practice of enterprise-wide risk management (EWRM) on internal auditing and risk management functions of public listed companies in Malaysia*. Retrieved 22 August 2012, from: [http://www.rmi.nccu.edu.tw/apria/docs/Concurrent%20IV/Session%201/14707EWRM\\_APRIA\\_2007\\_New.doc](http://www.rmi.nccu.edu.tw/apria/docs/Concurrent%20IV/Session%201/14707EWRM_APRIA_2007_New.doc).
- Matei, D., Cristea, D., & Capatina, A. (2012). Risk management in the age of turbulence - failures and challenges. *Annals of "Dunarea de Jos" University of Galati Fascicle I. Economics and Applied Informatics*, 2, 17-22.
- Meulbroek, L. (2002). The promise and challenges of integrated risk management. *Risk Management & Insurance Review*, 5(1), 55-66.

Missal, M., & Richman, L. (2008). New century financial: lessons learned. *Mortgage Banking*, October 2008.

Njogo, B. O. (2012). Risk management in the Nigerian banking industry. *Kuwait Chapter of Arabian Journal of Business and Management Review*, (10), 100-109.

Pearce, J. A. II, & Robinson, R. B. (2000). *Strategic management: Formulation implementation and control* (7<sup>th</sup> ed.). London: Irwin McGraw-Hill.

Protiviti Inc. (2006). *Guide to enterprise risk management: Frequently asked questions*.

Retrieved 23 June 2012,

from: [http://www.knowledgeleader.com/KnowledgeLeader/Content.nsf/dce93ca8c1f384d6862571420036f06c/87e5c452010aad9882571c00081a23c/\\$FILE/ERM%20FAQ%20Guide.pdf](http://www.knowledgeleader.com/KnowledgeLeader/Content.nsf/dce93ca8c1f384d6862571420036f06c/87e5c452010aad9882571c00081a23c/$FILE/ERM%20FAQ%20Guide.pdf) .

Oracle (2009). *Risk management: Protect and maximise stakeholder value*. An Oracle Governance, Risk, and Compliance White Paper. Retrieved 23 April 2012, from: <http://www.oracle.com/us/solutions/corporate-governance/032434.pdf>.

Rejda, G. E. (2011). *Introduction to risk management and insurance* (11<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

Shimpi, P. A. (2001). *Integrating corporate risk management*. New York, NY: Texere.

Skipper, H. D. (1997). *International Risk and Insurance*. New York, NY: McGraw-Hill.

Slovic, P., & Weber, E. U. (2002). *Perception of risk posed by extreme events: Risk management strategies in an uncertain world*. Retrieved 12 March 2012, from:

[http://www.ideo.columbia.edu/chrr/documents/meetings/roundtable/white\\_papers/slovic\\_wp.pdf](http://www.ideo.columbia.edu/chrr/documents/meetings/roundtable/white_papers/slovic_wp.pdf).

Stulz, R. M. (2008). *Risk management failure: What are they and when do they happen?* Fisher College of Business: Working Paper Series No: WP2008-03-017. Ohio: Ohio State University. Retrieved 13 April 2012, from:  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1278073](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1278073).

Ugoani, J. N. N. (2012). *Poor credit risk management and bank failures in Nigeria*. Retrieved 24 December 2012, from: <http://ssrn.com/abstract=2185013>.

Wolf, R., 2008. The evolution of enterprise risk management. *The Actuary*, 5(3), 19-22.

Yates, H. (2011). Insurance and banking: The butterfly effect. *Risk Management Professional*, 3, 26-27.

Yazid, A. S., Hussin, M. R., & Razali, A. R. (2008). A cross-sectional study on foreign exchange risk management by Malaysian manufacturers. *International Business Management Journal*, 2(2), 28-32.

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